

V 2. D462

Art & Design

The Council of Industrial Design

August 1957 No 104 Price 3/-

Design



U. LIBRARY

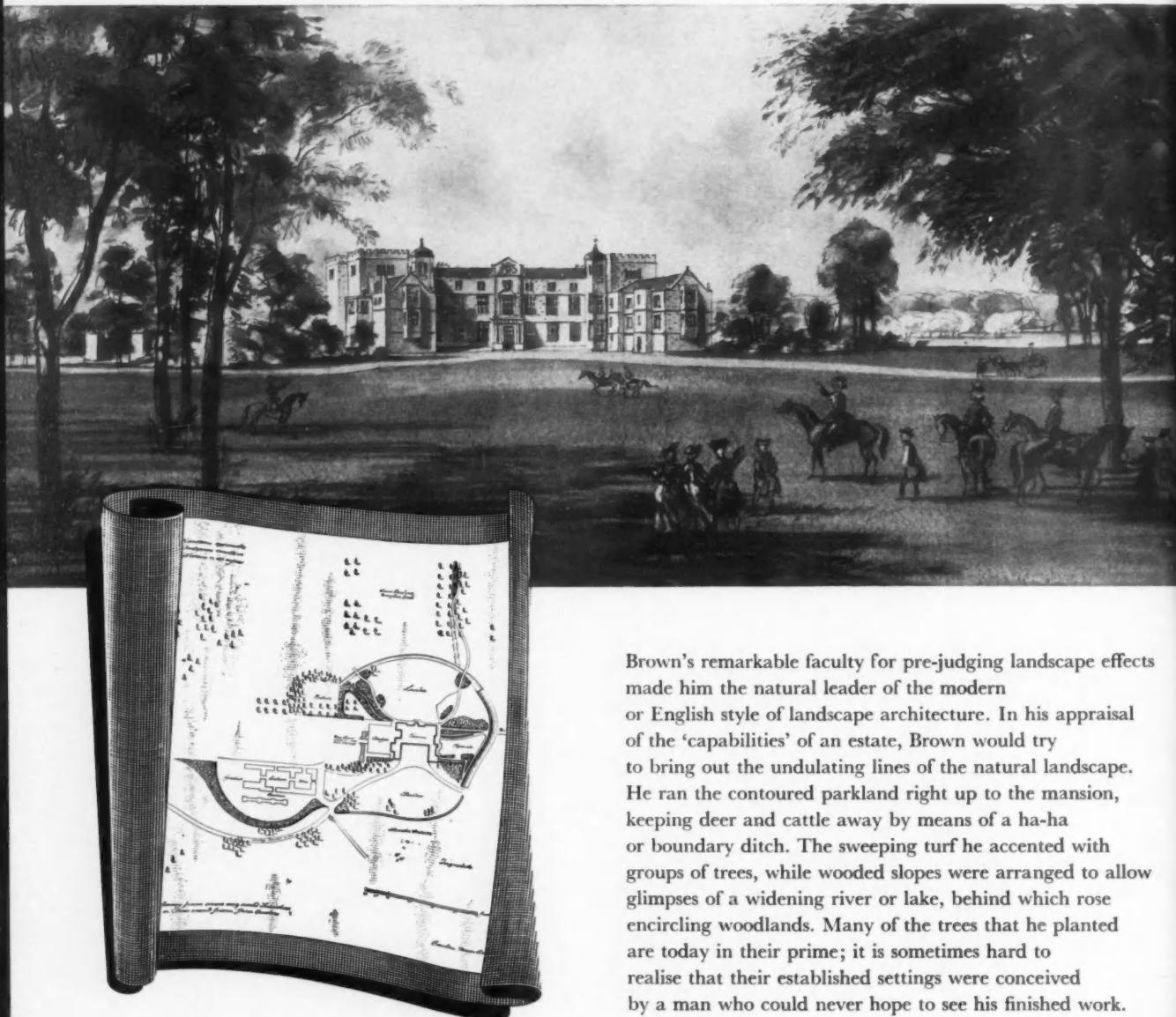
8 1957

PERIODICALS

PROFILE OF A CREATIVE MIND

No. 2 *Landscape-Architect*

Originally a kitchen gardener, Lancelot 'Capability' Brown (1715-1783) became the greatest English landscape-architect of the 18th century. He transformed heath, bog and rough pasture into magnificent parks, of which Kew and Blenheim are well-known examples.



Brown's remarkable faculty for pre-judging landscape effects made him the natural leader of the modern or English style of landscape architecture. In his appraisal of the 'capabilities' of an estate, Brown would try to bring out the undulating lines of the natural landscape. He ran the contoured parkland right up to the mansion, keeping deer and cattle away by means of a ha-ha or boundary ditch. The sweeping turf he accented with groups of trees, while wooded slopes were arranged to allow glimpses of a widening river or lake, behind which rose encircling woodlands. Many of the trees that he planted are today in their prime; it is sometimes hard to realise that their established settings were conceived by a man who could never hope to see his finished work.

In I.C.I., creative minds are constantly searching for new products and processes, and for improvements to existing ones.



Going places in 'Monotype' faces

If you are fixing up a holiday or planning a journey, the travel brochures and timetables you consult will almost certainly be printed in 'Monotype' faces giving distinctiveness, clarity and readability to the information you seek.

THE MONOTYPE CORPORATION LTD., 43 FETTER LANE, LONDON E.C.4

FLY BEA

YOUR
BAGGAGE
ALLOWED

See Europe by Coach

Caribbean & Bahamas

GORDON BERWICKSHIRE

*Fly SAS to
Scandinavia*

FLY BY B.O.A.C. TO THE FAR EAST

— *spend unforgettable days amidst the splendor, the romance, the artistic splendors of some of the most fascinating countries in the world.*
A few days — even weeks — in the bright light of the sun of a S.A.C.A. airline brings you to these wonderful lands, where all the colour and magnificence of the East is displayed against a background of sunlit skies and serene grandeur. — *FLY ON S.A.C.A. TO BURMA, the "Golden Peninsula" of climated limestone, where rubies, sapphires, topaz and tourmaline are the magnificence of the land, which, scattered throughout the length and breadth of the country, seem on the horizon to be scattered at every step. — TO BANGLADESH, ancient capital of whose temples and palaces, miradars, marble mother-of-pearl, gold mosaic and porphyry stones, have an enigma beauty to tax*

A. COOPER

and
pursue only, have an unusual beauty to take
your breath away... to JAKARTA, capital of Indonesia,
From where you can explore the islands of Java, with its mountains and waterfalls, hills
green valleys and charming pastures, and visit the Batak, long famed as one of
the most mystic tribes in the world, to SUMATRA and the mountains, the
the most rugged peaks and the most important trading centers in the
the world's largest pepper plantations and the most important trading centers in the
Orchids, where the traditional trades and customs of the Far East flourish
alongside the modern ways of the West in a manner strange and striking
contrasts... and so, leaving beautiful latitudes, finally, to
and a square in Java, where every morning brings its own
entertainment - the sponge, when the whole country becomes a
vast cherry orchard in bloom; the tomato, when
pig-headed beetles are perfect for swimming and
boiling; carrots, with its golden paddle fields and crimson
maples; and winter, time for winter sports on the
many exhilarating mountain resorts.

DOMESTIC SERVICES
6 AVE. GREEN CHICAGO 13
6 hrs. 60.00. Standard weekly service
DAILY TEMPERATURE DAILY APPROX 70-75.00
6 hrs. 60.00. Standard weekly service.
CHICAGO 13-2444

Due to the increased cost factor, a marriage is now used as a
tax deduction for many individuals.

GENERAL PURPOSE. On 0.0.4. General purpose is a general term for all types of aircraft used for general purposes.

These facilities may be obtained from B.O.A. 82000 and Trend Agencies.



Palladio wallpaper "Bouquet" No. 44150. An accent on elegance for the festive occasion. Drawing by John Ward, A.R.A. A Palladio wallpaper won an award in the "Designs of the Year" Exhibition promoted by the Council of Industrial Design.

A SERVICE FOR ARCHITECTS

The primary purpose of our ARCHITECTS' DEPARTMENT is to give advice on the use of wallpaper, but we welcome enquiries relating to the interior scheme of decoration as a whole. Our products may be seen at the Showrooms in London and Manchester, and if required we can provide a complete specification incorporating wallpaper, paints, furnishing fabrics and floor coverings. The Architects' Showroom in London is reserved exclusively for the use of Architects, Interior Designers and their clients.



THE ARCHITECTS' DEPARTMENT
THE WALL PAPER MANUFACTURERS LIMITED 125 HIGH HOLBORN LONDON WC1
OR KING'S HOUSE KING STREET WEST MANCHESTER 3

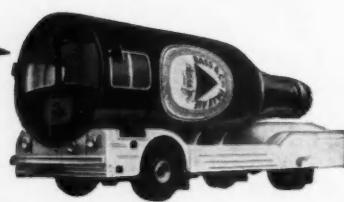
*In business
creating the right impression
begins with having
the right furnishings*

*Write for our new
booklet "Interiors"*

When furnishing at boardroom level, call in

HEAL'S CONTRACTS LTD

196 TOTTENHAM COURT ROAD LONDON W1 TELEPHONE MUSEUM 1666



FIBREGLASS

TRADE MARK

**The backbone of
reinforced plastics
for all kinds
of vehicles
for all kinds
of reasons**

Complex sections of FRP can be moulded in one piece. FRP saves weight and it doesn't drum, dent or corrode.

- 1 Fibreglass Reinforced Plastic cab
- 2 Fibreglass Reinforced Plastic bonnet, wings and bumper bar
- 3 Fibreglass Reinforced Plastic body
- 4 Fibreglass Reinforced Plastic cab
- 5 Fibreglass Reinforced Plastic front and translucent roof
- 6 Fibreglass Reinforced Plastic body

TIBOR

"Gondola"—one of Tibor's latest Textureprint range of screen printed designs on satinfaced cotton. Other designs like "Niza", "Palermo" and "Sunburst" are available in exciting colourways to blend with Stockwell carpets and Tibor Deep Texture upholstery fabrics. Produced by Tibor Ltd. Stratford-on-Avon.

VESPER

This elegant Easy chair model 424 designed by N. K. Hislop has Sycamore finish legs, latex foam cushion and is upholstered in Tibor's latest "Seville" deep texture fabric, which is available in 10 new shades. Produced by: Gimson & Slater Ltd., Walton Street, Long Eaton.

stockwell

Carpet: Equerry (regd.) Wilton filling in design "Caribbean" created by Tibor Reich, F.S.I.A. Stock-colouring, Black/Lime. All-woollen Pile. Guaranteed mothproof for life. Produced by: S. J. Stockwell & Co. (Carpets) Ltd., 16 Grafton Street, London, W.I.





hille of London Ltd

This boardroom furniture was selected from a wide range of contract furniture made by Hille of London Ltd. Please write for further information or visit our showrooms.

The addresses of these are

Hille of London Ltd 39-40 Albemarle St London W1 HYDe Park 9576

Hille of London (Midlands) Ltd 24 Albert St Birmingham 4 Midland 7378/



for new anthology,
true philology
jotting, swotting,
astral plotting,
legal cases,
faces, places,
science and prose
- everyone knows the best is a **ROYAL SOVEREIGN** pencil



By Appointment
Pencil Makers
to the late
King George V

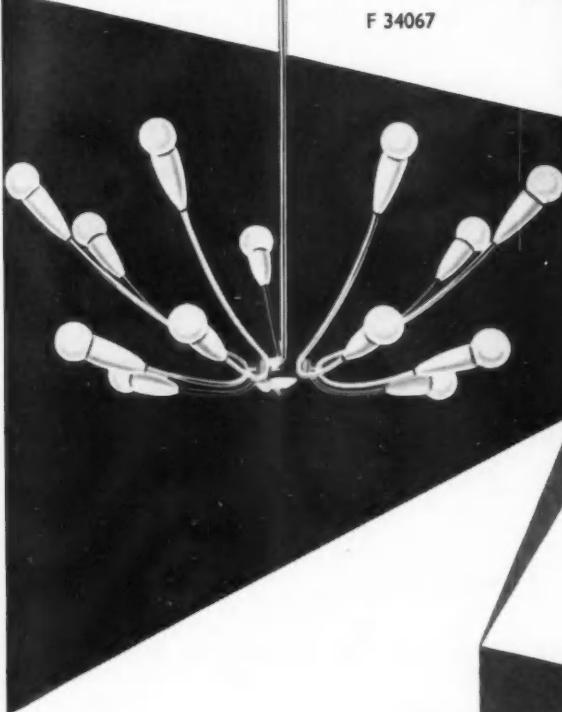
THE ROYAL SOVEREIGN PENCIL CO. LTD., LONDON, N.W.10

British Made

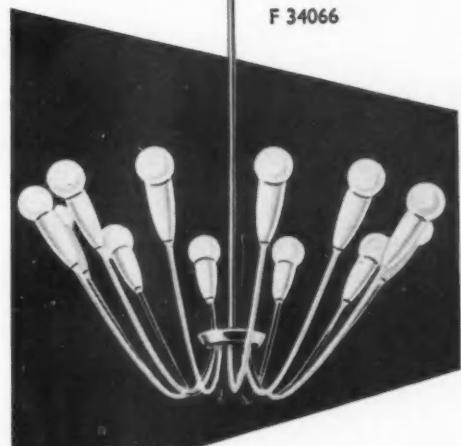
for contemporary living

Fittings styled for simplicity in a wide choice of designs. Gay colour combinations that harmonise effectively with modern interiors and furnishings.

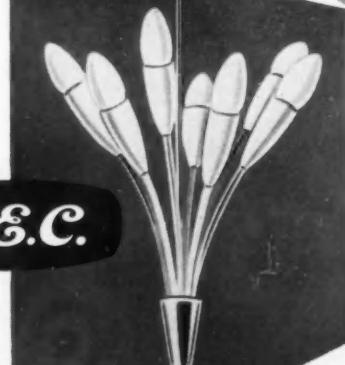
F 34067



F 34066



F 34068



contemporary fittings by

G.E.C.

THE GENERAL ELECTRIC CO. LTD.,

MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

Overheard in The Design Centre



- "This place is amazingly well patronised"
- "A wonderful source of information"
- "from here to lunacy"
- "This place certainly makes you want to get married"
- "Which way shall we go round, the usual?"
- "A wonderful show, beautifully set out and impeccably kept"
- "This is the famous place"
- "It's the sort of place I've always wanted - you can sort out your ideas"

The Design Centre where people solve their buying problems

THE DESIGN CENTRE

COUNCIL OF INDUSTRIAL DESIGN

28 HAYMARKET · LONDON · S · W · 1 · OPEN DAILY 9.30 to 5.30



a lightweight charmer

luggage made with Geon PVC

Geon PVC has a genius for travel. Strong, durable,
yet the spirit of lightness itself,
it gives to the leathercloth in Watajoy luggage
the assurance of a long, wear-free life.
Smart cases stay smart without scuffing
and scratching despite the roughest treatment
from the most ungentle hands.
Used for portfolios as well as portmanteaus, for attaché
cases and cabin trunks, leathercloth made with
Geon PVC will withstand the most exacting rigours
of travel to Winter Sports or through Arabian Nights.
It has a lasting colour and finish . . .
can be kept clean simply by wiping with a damp cloth.
For further information about Geon PVC
write for Booklet No.9

Watajoy suitcases by S. Clarke & Co. Ltd.,
in Everflex leathercloth made by Bernard
Wardle (Everflex) Ltd. using Geon PVC.

'Geon' is a reg'd trade mark



BRITISH GEON LIMITED

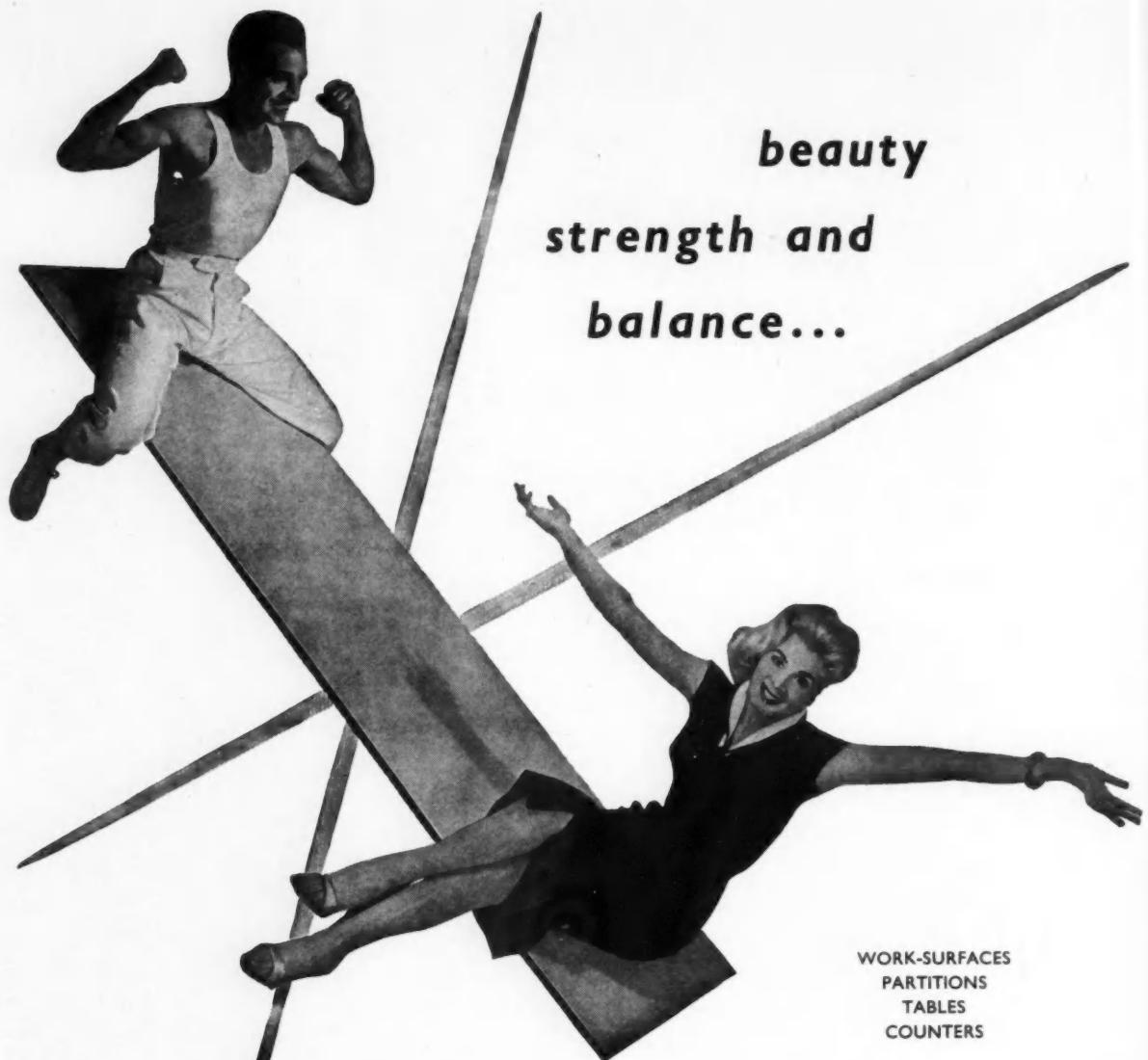
Sales and Technical Service

DEVONSHIRE HOUSE

PICCADILLY

LONDON W1

MAYFAIR 8867



A core of Weyroc man-made Timber for solid constructional strength : a surface of colourful, durable, melamine plastic. That's WEYDEC, the board that makes plastic surfaced constructional jobs as straight-forward as carpentry. No adhesives. No presses. No veneers. Just cut the size you need from a WEYDEC board. One job only and your table-top, shelf, partition or what-have-you is there, surfaced and decorated.

WEYDEC costs less than conventional plastic veneers, adhesives and base material together. With WEYDEC the job's practically done before you start.

weydec regd. the plastic surfaced
constructional board

Write for a sample of Weydec to:-

AIRSCREW COMPANY & JICWOOD LTD · WEYBRIDGE · SURREY

Number 104

August 1957

Design

CONTENTS

EDITOR *Michael Farr*

EDITORIAL ADVISERS *Sir Gordon Russell*

Alister Maynard

Paul Reilly

J. Noel White

Peter Hatch

ART EDITOR *Kenneth Garland*

DEPUTY EDITOR *John E. Blake*

EDITORIAL ASSISTANT *Gillian E. Naylor*

PRODUCTION *Aubrey Hewitt*

STAFF PHOTOGRAPHER *Alfred Lammer*

BUSINESS MANAGER *Arthur Sudbery*

13 Hotels

14 Pointers

15 Automation and design 2 - input and output devices *J. Christopher Jones*

This forecast of the implications of automation for designers suggests that requirements of individual consumers will be met by a system of production sufficiently flexible to allow for variations between successive articles

20 Design analysis 4 - general purpose axe *L. Bruce Archer and J. Beresford-Evans*

In this fourth article of the series a simple hand tool was selected for a programme of controlled tests to determine some of the basic principles on which a design of this type depends for its success. The results are compared with subjective assessments and the conclusions are discussed by the manufacturer

26 A survey of furnishing fabrics *Dan Johnston*

One of the most significant features of the British furnishing fabrics industry today is the highly individual approach to design shown by the leading manufacturers. The author analyses these various design handwritings and suggests that, as major producers, our export prospects will benefit from this specialisation

36 Review of current design

38 House styles evolving *Alec Davis*

The author discusses three ways recently chosen to establish a house style

41 Furnishing by hire purchase *Dorothy Meade*

The effect of deferred payments on buying habits is discussed in the sixth article in the series on consumer needs

43 Overseas review

USA Long range planning for tomorrow's kitchens

Recent announcements by American designers and appliance manufacturers suggest a new concern with both the technical and human problems affecting the future design of equipment serving functions traditionally performed in the kitchen. Some designers believe that this new conception of long range product planning will replace the current American dependence on artificial obsolescence

53 Miscellany

55 News 59 Letters 61 Books

Manufacturers are
invited to consult
the Council of
Industrial Design's

RECORD OF DESIGNERS

a free service of
recommendation
and introduction
of designers
to industry

The addresses of manufacturers in this issue are on page 61

Editorial Circulation Advertisements The Council of Industrial Design, The Design Centre, 28 Haymarket, London SW1 Tel: TRAFALGAR 8000 AND The Council of Industrial Design Scottish Committee, 46 West George Street, Glasgow C2 Tel: Glasgow DOUGLAS 3914

Design may be obtained from booksellers at home and abroad. Yearly subscription rate: UK 36s post free



This is a drawing made for Balding & Mansell by the Swiss artist Hans Falk. Born in Zurich in 1912, he is now instructor in animal drawing at the School of Arts and Crafts there. At one time in the studio of GRAPHIS, he is known as book illustrator, mural painter, poster and lithographic artist. Falk has travelled widely on the Continent and in the Middle East, and has exhibited in many capital cities. We are privileged to present his work in this country, and believe that we can do full justice to his art by reproducing it with the unique technical resources of our Wisbech factory.

BALDING & MANSELL LTD designer-printers for home and export

3 Bloomsbury Place, London, W.C.1 Telephone: Langham 6801

Design Magazine is printed by Balding & Mansell at their factory in Wisbech, Cambridgeshire

HOTELS

HOTELS PLAY A VITAL PART in the task of selling Britain to a world whose standards are rising relentlessly. Our visitors, business men or tourists, are influenced by the impression made upon them by the place in which they stay; it can become the touchstone of success or failure. The foreign buyer who remembers chiefly the discomfort of an out-of-date, inefficient and ugly hotel is unlikely to linger on his next trip. There are, of course, signs of progress; even some of the great railway hotels are beginning to shape their unpromising material to modern needs. But to many travellers from abroad it must seem that the British patron saint of hospitality is some latter-day Rip Van Winkle.

This is bad for trade. Every successful business man knows the value of the right atmosphere when it comes to delicate negotiations. The business lunch can be as much an art as the diplomatic reception and often far more rewarding. The flamboyant choice of a Porterhouse steak at the wrong moment could stifle a deal in mid-career. Mood, atmosphere and sympathetic environment are rightly considered to be critical on such occasions. It is therefore a sad reflection that no matter how far-sighted and imaginative a project may be, the business man who wishes to broach it over a meal, has usually to do so in the tawdry atmosphere of a Pompadour's boudoir or the quaint recesses of a mock Tudor parlour where every care has been taken to obscure or disguise the present, and ignore the future.

In one so concerned to create the best conditions for negotiating, this blind spot of the business man is difficult to explain. It cannot be argued that he only accepts this world of pantomime because distinguished alternatives are so rare; too often he perpetuates it in his own boardroom.

The hotel industry itself is in difficulty. Like so many other concerns it has a great tradition which it values and wishes to exploit, but is often at a loss to know how to combine the charm of the old with the vitality of the new. Yet the problem is capable of solution as some recent examples show. Success will usually lie with the experienced designer, rather than the enthusiastic hotelier, who despite his hundred and one other jobs, fancies his hand at interior decorating. But development in the industry is inhibited by the crippling cost of building, payment of purchase tax on equipment and the strait jacket of the Catering Wages Act. Fresh ideas which involve expenditure are consequently regarded with suspicion, and old attitudes persist.

The challenge is there and opportunities await those who are prepared to face up to the requirements of today. There is plenty of design talent to serve the large hotel companies, the breweries and the private firms, if they will have the courage to commission it. What is needed is a determined effort by hoteliers large and small to create a standard of accommodation and service which will enable our growing tourist industry, now the third largest in the world, to give the best impression of Britain to our visitors from overseas. A step in the right direction is reported on page 55.

Zurich in 1911
one in the studio
artist. Falk
capital cities. W
ce to his art

l export
gham 680

Cambridge

Pointers

News for designers

The SIA has launched a monthly bulletin to provide its members with prompt news reports. To some extent this newsletter will invade the province of the society's own long established 'Journal', which is now to appear only four times a year. This will be disappointing for those who recognise the 'Journal' as a unique forum for unbridled and discursive writing on matters dear to designers. To placate those readers who will feel the loss the new 'Bulletin' could become a worthy supplement to the 'Journal', if not its successor. One prominent member of the society has already suggested that the latter be an annual publication.

The new 'Bulletin' could be desired for many reasons. As the first issue promises it will give up-to-date accounts of group activities within the society, and report on its midland region, social committee, and changes in membership. But what of the work of members themselves? Apart from a few sketchy items there is nothing to indicate what designers are doing. Such reticence has perhaps become a habit with the SIA, for the 'Journal' has seldom devoted its pages to real news of commissions won, work in progress and designs completed. The society's biennial review 'Designers in Britain' has a special role which the 'Bulletin' need in no way usurp. What is needed is a current survey of work in hand. As we well know the majority of British designers are like oysters with their information. Surely within the pages of their 'Bulletin' they could be persuaded to swap a few pearls with each other.

Rural technology

The traditional charm of rural industries might easily tempt those concerned with their welfare towards an attitude of sentimental preservation. But that blind alley has been stoutly avoided by the Rural Industries Bureau whose practical policy has been to graft on to tradition the advantages of modern methods and techniques. At a lively exhibition of 'Country Industries' in Holland Park, London, the bureau presented its work of rural development to the Londoner. A smart prefabricated exhibition stand of laminated timber and canvas, housed traditional hand crafts alongside technical trades; the blacksmith's fine scrollwork and the precision fitting of his heir the agricultural engineer, the moulded plastics hull and the clinker built boat with many others, each representative in its way of today's craftsmanship.

As the chairman of the Development Commission, Lady Albemarle, said at the opening: "It is no part of the commission's policy nor the bureau's function to preserve useless activities simply because they are picturesque. We encourage the maintenance of high

standards, but we do not worship the past. On the contrary we live in the present and plan for the future". This excellent little exhibition provided a pointer to a problem which faces so many of our industries today.

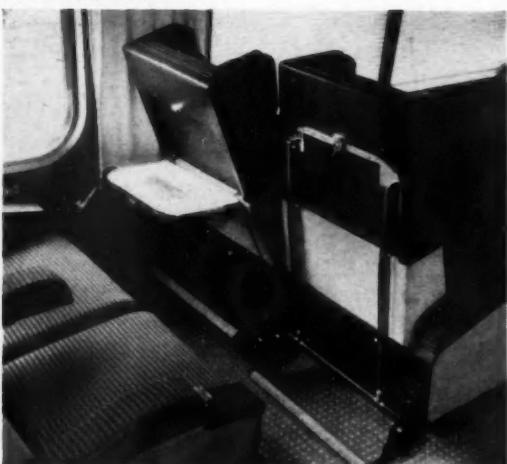
Looking ahead

The prospect of greatly enlarged markets for British goods in Europe presents design and production problems to be analysed in subsequent issues. The bigger market will be more competitive than anything our consumer goods industries have so far experienced. Larger production runs will be needed not only to keep prices down, but also to make economical the more complex products designed to meet a wider variety of consumer needs.

To be ready to create and then to meet the demands of the widening market, British firms must plan design and production from five to fifteen years in advance. For the majority this will mean an entirely fresh orientation to their business. Product planning – an executive duty rapidly gaining ground in the management of American companies – will be re-defined and intensified.

The implications for the designer are evident. Product planning means design forecasting for a potential market. It is based on specialised market research to determine the consumers' new requirements and on the ability of the firm to re-tool products and increase their output. Our series of articles on consumer needs shows that too few firms care what happens after a product is sold, and that practically none investigate – on the basis of how people live now – what is likely to be demanded in future. The article on long range kitchen planning which begins on page 43, demonstrates conclusively the value of looking ahead in the American market. If British firms are not to miss their chance in an even larger market, product planning should begin now.

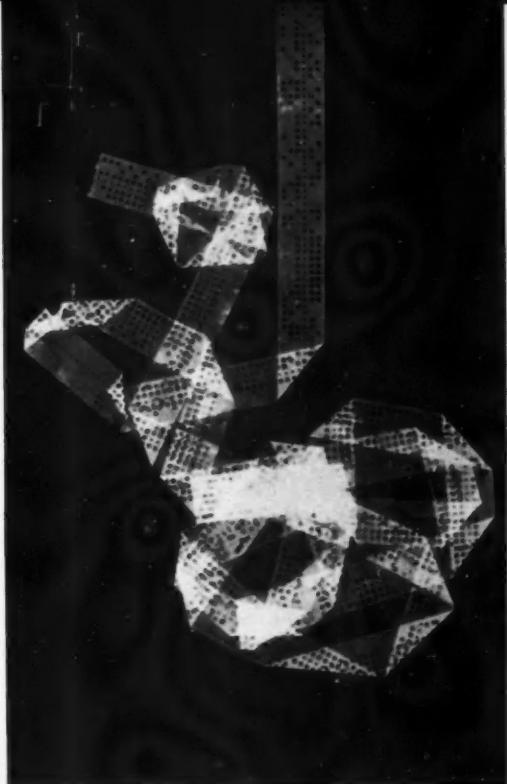
Railway progress



Sam Lambert

The British Transport Commission has revealed new carriages and locomotives. Among the consultants employed were Farmer and Dark whose design for a first class saloon for Cravens Ltd included the seats and tray tables above. Other BTC designs will be reviewed in the October issue.

Human requirements, in all their randomness, are translated into arrangements of holes punched in paper tapes which are fed into input/output devices such as the tape reader of a digital computer. This is a visual example of the invisible electrical process that goes on in many input/output devices where the variety of human characteristics is imposed on a continuous flow of electricity, e.g. the telephone caller's voice on the current in the wire. By this means the apparent incompatibility between continuous standardised processing and discontinuous, variable user requirements is elegantly overcome.



WE HAVE SEEN IN DESIGN for July that the central mechanism is dull to look at. This is because it carries the imprint of the ideal automation concept of a uniform flow of material being turned out by a uniform array of standard machines, working continuously day and night with as little variation as possible. In the automatic telephone exchange, 2 overleaf, we can see this dull and endless repetition of standard components. The only traces of human influence in the central mechanism are the spaces left between rows of machines so that men can get at them when they go wrong.

The input and output devices, 3, 4, 5 and 6, are different in every fundamental respect and carry the human imprint closely, as does a violin or a teaspoon or a suit of clothes. That these can look and be so human, so biotechnic*, is the first hint we have of the very new and surprising fact that automation need not make any of the demands on human adaptability that have given the word *industrial* its many unpleasant implications. Noise, vibration, polluted air, working at the pace of the machine, clocking-in, clock watching, rush hours, form filling, paper work and all the other inhumanities that are inherent to mechanised production, disappear for good when automation takes their place. The chief agents of the change are the input and output devices which enable the users of automation to initiate the process and enjoy its benefits without coming into physical contact with the machinery itself.

Automation and design 2

INPUT AND OUTPUT DEVICES

In the first article of this series the system of automatic production was shown to have two distinct parts: the central mechanism, where materials and information are automatically processed, and the input and output devices which convey information to and from the people who initiate and use the system. These devices take non-mechanistic forms that reflect their subservience to human needs. The author suggests that they may eventually be used to convey the differing requirements of individual users to a system of production that will be sufficiently flexible to allow for variations between successive articles. This view offers a significant challenge to the commonly held belief that automation necessitates more uniform products.

Continuity and variety

The basic difficulty of automation as a means of making things for human beings comes to light at this point and so does the extraordinarily elegant way in which it seems to have solved itself. The difficulty is that automation demands a continuous flow of identical material and always tends to this condition, whereas human requirements are inherently and characteristically various and random and lose their humanity as soon as they are regimented. The solution that has been reached hinges on the fact that a continuous flow can be formed by a row of dots or units. When these are taken together they form the ideal automation medium and when they are taken separately they can represent the variations of human requirements. This is symbolised in the paper tape, 1. It will be seen that the dots are a random manifestation of some human characteristic whereas the rows in which they are aligned and the paper tape itself are continuous.

All input and output devices are a means of imprinting the randomness of human requirements on a continuous flow of electrical impulses or pieces of paper. Fundamentally, it is cheaper to let an automation process run at a constant speed than to

* Biotechnic, a word used by Lewis Mumford to refer to the eventual use of machines to enhance rather than distort human life.

Automation and design

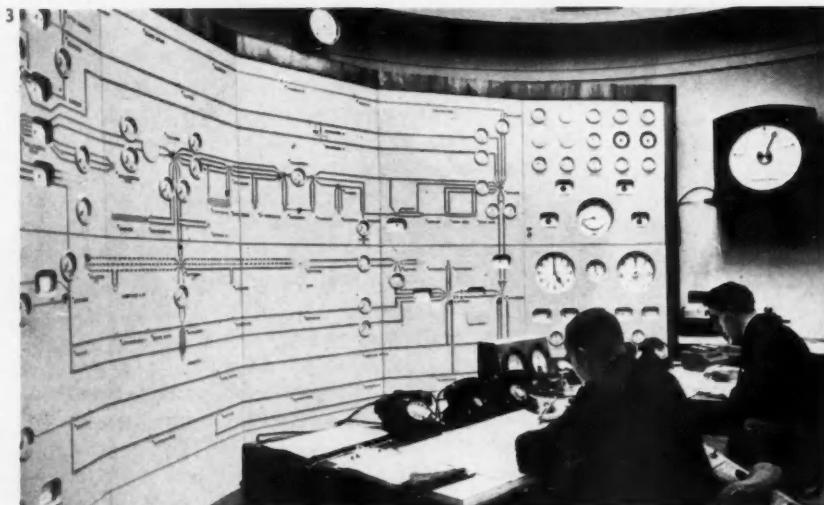


2

When automatic controls take the places of industrial workers the factories may be replaced by a system of central mechanisms. The automatic telephone exchange, 2, can be regarded as the prototype of such mechanisms for it exhibits the significant characteristics of automatic production.

These are: no workers present; only a few maintenance craftsmen who make occasional visits; continuous working that can only be interrupted at great cost and inconvenience; extremely ordered arrangement set out to give immediate accessibility to defective parts which are automatically located; the building up of complete machines from large numbers of general purpose units. The dull and inhuman aspect of the central mechanism differs in respects from the predominantly human scale and form in nature, of the input/output devices, 3, 4, 5, 6 which are the means of contact with the users and initiators of the system of automatic production.

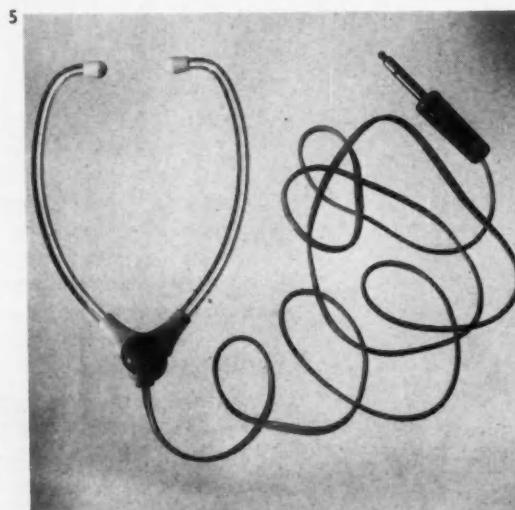
2, GPO telephone exchange; 3, national control room of the power system at the British Electricity Authority; 4, 'Interecorder' designed by K. J. Hutchings for E. Shipton & Co Ltd; 5, tape recorder headset for Grundig (Great Britain) Ltd; 6, data processing machine for 'IBM 704' computer.



3



4



5



6

stop and start it, because the flow of current carries on whether or not a message is being sent. In the telephone, as in other input/output devices, this principle is applied only to information and not to materials. But the newspaper photograph, 7, and the television picture, are material things as well as vehicles for information and they are also made up on this principle. Long rows of dots of varying sizes are put together to make a complex and infinitely variable whole by a process of automatic assembly.

Different products from identical units

Is it possible that such a process could be extended to the production of three dimensional goods? In such a case one can imagine the manufacture of domestic goods from minute identical units that would be assembled into a complex whole by the automatic addition of units side by side. Each product could differ from the next without any interruption of the process. Such a system might be sufficiently flexible to allow for the variation of successive products to suit the personal requirements of particular users. These differ-

ing requirements might be transmitted directly to the central mechanism by the user himself using an input/output device. Ordering goods in this system would resemble the act of dialling a telephone number. If this is a true picture of automation in its final state we can expect to find automatically produced goods becoming more diverse and less standardised than anything we have seen since things were made by hand.*

Already there are tangible signs of such a trend. One is the change from Henry Ford's offer of any colour of

*The presence of this ultimate principle of mass production in natural growth has been noted by Sir George Thomson:

"There is one feature of the world we live in which is so universal that it seems to have escaped proper notice. For want of a better name I will call it the 'principle of mass production'. It is the tendency which nature shows to repeat almost indefinitely each entity it makes. . . . A beech tree is one of a species which contains a vast number of individuals, each indeed different, but clearly distinguished from other creatures made of much the same materials - whales or orchids for example. Each tree has in season a large, though not perhaps so large, number of leaves; each leaf is made of relatively few kinds of cell, each present in large numbers. Each cell is made of molecules of various kinds, some of which - though perhaps not all - are extremely numerous. Certainly the whole is made of enormous numbers of a few kinds of atoms. . . . This, one may be sure, is one of the fundamentals of the world which further discovery will not alter. Atomicity in its widest sense, mass production by nature, is the deepest of scientific truths."

'The Foreseeable Future' by Sir George Thomson, CUP, 1955.



Like the paper tape, the photographic half-tone shown above represents the manufacture of a complex and variable whole from a succession of repetitively assembled bits. Can we eventually hope that this principle - unit construction taken logically to its limit - will be used to allow automatic machines to make goods

that match our separate and personal requirements as closely as a photograph can resemble our outward appearances? In such a system individual variations in design would be transmitted directly from the user to the production control mechanism via an input/output device.

motor car as long as it is black, to the present condition which allows the customer's choice from a large number of colour combinations to be automatically fed into the production line so as to give variety without interruption of flow. The unexpected discovery that the capital cost of an automatic transfer machine line such as, 9, is less, and not more than that of the separate operator-controlled machines that it replaces,* 8, means that changes in design are less expensive to make. The standardised machining units that can be seen all along this line are themselves more adaptable than specialised machine tools and can be more readily altered to carry out design changes.

Meeting human needs

But against these intimations of variety we must set the many contemporary and expert prophesies that automation will mean fewer design changes and more uniform products than we have at the moment. The difficulties of reconciling the uniformity of automatic production and the variety of human ways are symbolised in the telephone itself. The most obvious automation characteristics - uniformity and continuousness - are present in the electric current that passes through the telephone system. This current is not visible and does not impose any of its impersonal and inhuman qualities on the instrument; these are hidden from the user. It is a purely passive representative of the central mechanism which has imposed upon it the character-

* 'Automation' a report on technical trends and their impact on management and labour, by the Department of Scientific and Industrial Research, HMSO, 1956, 6s.

teristics of human speech. The caller's voice, which represents the extreme of human variety, is conveyed through the system with little change regardless of language, accent or intonation.

This balance between the freely expressed variety of the human side and subservient uniformity of the mechanical side is symbolised in the shape of the instrument. The most obvious and characteristic part is the handset and this has a shape that is bony and biological in its very close relationship to the human mouth, ear and hand, 10. The dial is the only part that has a mechanical look and, as might be expected from its appearance, is the only part towards which the caller has to adapt himself in order to treat it personally. It is significant that while the telephone is so very much more closely matched to human variations and needs than are many other domestic appliances, it is also the only one that is completely standardised. But this is a uniformity which, like that of the electric current, is not observed and seldom complained of; while the adaptation of the handset to the human anatomy is as obvious as it is convenient.

It may well be that this biotechnic look which we see in the telephone, but not always in the other input and output devices that exist at the moment, will become a dominant source of aesthetic inspiration. One might expect to see now the emergence of a 'manline' instead of the streamline. Each of the articles in this issue takes its form directly from the human anatomy and together they give an impression of what such a biotechnic style might be like.

The automatic transfer machine, 9, at the Austin car works, is cheaper and more adaptable than the separate machine tools, 8, that it replaced. This is an indication that the variety of human requirements can be met more easily by automation.



'The products', the third in this series of five articles on 'Automation and Design' will be published in the October issue.

The eventual presence of an automatic system producing goods relentlessly and continually at top speed is likely to alter profoundly the methods of both designing and selling. The third article suggests that intuitive designing will be

replaced by arduous and exact analytical methods so that production can be precisely and continuously adjusted to demands. Selling is then replaced by service-marketing of goods hired on long term contracts. Such a change would mark the end of commercialism and styling would make the basing of design on user research a necessity.

voice, which is conveyed regardless of the variety of shape of the characteristic part. It is bony and to the human eye only part the expected finds which to treat it as a telephone human voice domestic which is complete which, like the hand and seldom the handset convenient. Look which the other impression, at the moment, of inspiration. One of a 'manlike' articles in anatomy and such a bi-



The style of the telephone handset is natural to itself and looks as if it was derived only from a close study of the telephone user's actions. This example was designed long before ergonomics, the technique of matching machines to human requirements, had been given a name or become widely practised. But the adaptation of the central part to the hand, the relation of the operative parts to the mouth and the ear, and the absence of irrelevant styling all give the impression that the designers were guided by an ergonomic intent.



These articles take their shapes more from the human anatomy than from any unnatural style, and they give us some idea of the biotechnic forms that may be evolved in the design of input/output devices.

DESIGN ANALYSIS 4

L. BRUCE ARCHER and J. BERESFORD-EVANS

General purpose axe

MAKER Edward Elwell Ltd
PRICE £1 8s

The fourth article in this series discusses a general purpose axe. It was chosen from a variety of hand tools accepted for display in The Design Centre, because it looked strong and useful and gave the impression of being of good quality. It was also a type of product of which most readers of DESIGN would have had personal experience. In an attempt to find a realistic basis for assessing a design of this type, the axe was subjected to informal tests, under conditions similar to those which the ordinary purchaser might be expected to encounter, and to formal tests under laboratory conditions. The results of these tests are described, and the manufacturer's comments on the authors' conclusions are included at the end of the article.

THE SUBJECTIVE ANALYSIS of a product, where the critic expresses his personal opinions on its merits and demerits, usually makes challenging and interesting reading. Unfortunately, it is not always wholly conclusive. Indeed, sometimes when non-typical circumstances are present at the examination, it may be quite misleading. This does not imply that the personal judgment of an informed and sincere critic does not have an essential place in design criticism. On the contrary, since it is the subjective view of each individual consumer which passes the only final judgment for the commercial future of a product, the personal approach to design criticism is very often most significant.

The laboratory approach, on the other hand, whilst producing precise judgments, frequently fails to reflect the verdict of the market-place by setting too much store by factors which, though demonstrably related to efficiency or precept, yet make little impression upon the consumer. In preparing this analysis of the Elwell axe both subjective and objective tests were conducted, simultaneously and independently, and the conclusions were drawn from a comparison of the results of both series of tests.

THE PERSONAL APPROACH

The feel of the 'balance' of this axe when it is held in the hand, as it might be by a prospective purchaser in a shop, is not immediately impressive, but it handles very satisfactorily in use and compares favourably with conventional types of hand axe. Chopping is fast and easy and, after a little experience, the work is accurate. Since the blade behind the cutting edge is thin and the centre of inertia appears to be satisfactorily in the centre of the cutting edge, a badly aimed or loosely held blow is unlikely to turn away. The amateur's fault of hitting

beyond the target, so that the handle hits the log, is well taken care of by the metal stem.

The handle

When the tool is used as a chopper, the handle, 1, tends to work out of the hand so that the grip is unnecessarily tight and a new grasp has to be taken rather too often. When used as a hammer, the handle is satisfactory but not comfortable. Rather than increase the thickness of the butt, the handle could be crooked in a definite manner, after the style of a kukri, 2. Aesthetically



the ogee sway from metal stem to handle is incomplete and seriously interrupted at the ferrule position. There is every justification, on a product of this type, for



Design analysis

excellent mahogany stain over a white wood, but the cream painted bands, which appear to imitate inlay, are not appropriate and wear off easily.

As a hammer

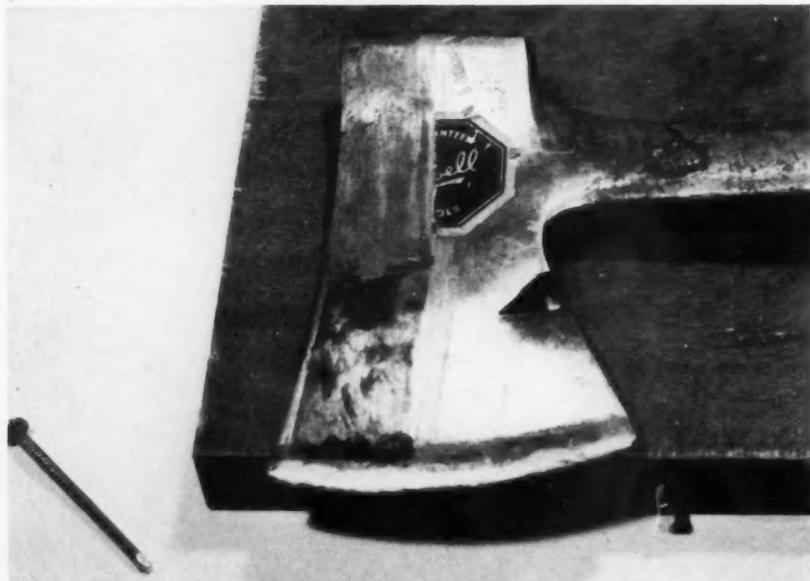
The square hammer head is useful (for working close to a face, etc), but the centre of inertia seems to be close to the edge nearest the handle, and encourages striking beyond the target. The notch for nail drawing is excellent when used flat side up. In this position it could grip a lost-head and hold all the work which could be applied. However, this requires that the nail head shall be exposed by at least $\frac{1}{8}$ inch. When used notch side up - to grasp an almost flush nail - the gathering was poor and the holding less than that of a claw hammer, 3.

THE LABORATORY TESTS

Six axes and 26 people were involved in nearly 400 formal tests. Great care was taken during the experiments to reduce to a minimum the intrusion of chance factors into the results. It was considered that commercially the most sensitive feature of this type of product is the impression gained by a prospective purchaser in the tool shop when it is weighed in the hand and swung as if in chopping, in comparison with similar products. In order to test this feature without introducing other unknown variables, the axe was compared, not with competitors' products, but with five similar models which had been modified in the laboratory. These

3

3 Nail drawing with the V side of the notch uppermost.



4

4 This illustration shows how the weight of the original axe as supplied was modified in other axes used in the tests. The heaviest axe, top, had 6 oz added to the head. In the lightest axe, bottom, the head was ground away to reduce the weight by 4 oz.



Photographs of test axes
by Sam Lambert

ood, but the
mitate inlays,

king close to
s to be close
ages striking
drawing is
s position it
work which
that the nail

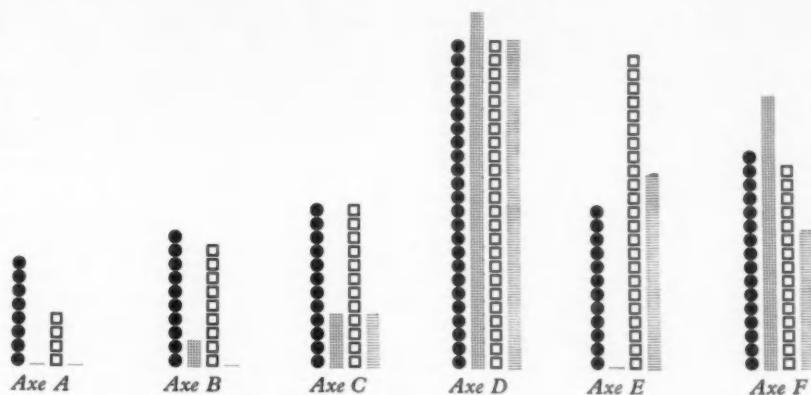
When used
sh nail—the
han that of a

n nearly 40
g the exper-
ion of chan-
that commer-
type of produc-
purchaser is
and and swing
similar produc-
roducing other
red, not with
similar model
latory. The

alterations were mainly concerned with changes in weight and changes in the positions of centres of gravity. The manufacturer provided six samples from normal stock, and the weights of these were found to vary from 1lb 7½ oz to 1lb 9½ oz. The average of the six samples was 1lb 9 oz. These weights were adjusted so that one axe weighed exactly the average 1lb 9 oz, two were reduced to 1½ oz and 4 oz below average respectively, and three were increased to 1½ oz, 5½ oz and 6 oz above average respectively, 4.

Formal chopping test

Twenty-six people of varying age groups and types were selected to act the role of prospective purchasers in the series of tests. A one-inch diameter bar of pure aluminium was used as a target for the principal chopping test in order to avoid the variability inherent in the nature of wood. The volumes of metal displaced were taken as measures of relative efficiency in chopping. Each tester was given separately an opportunity of making one or two trial strokes with one of the prepared axes, and was then invited to strike the test bar with each axe in turn, and to state his preference, 5 and 6. The sequence in which the axes were used was changed for each test in a statistically calculated random order with the object of eliminating the effects of prejudice or an increase in skill gained through practice. The results showed that this precaution was both effective and necessary, since in no case was the first axe used found to be the most penetrating, though out of the



The charts above and below indicate relative popularity and efficiency in relation to the weight and centre of gravity in each of the five modified axes and the original axe as supplied. C is the original axe in each chart.

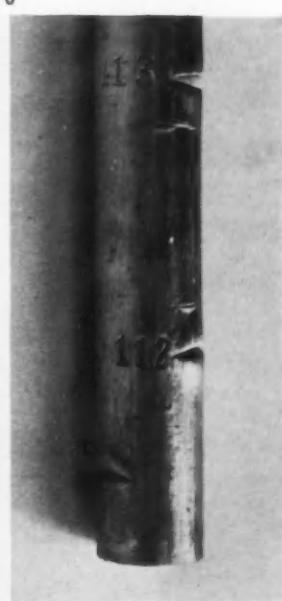
●●● = centre of gravity
■■■ = popularity
□□□ = weight
▨▨▨ = relative efficiency

Axe C is the original model	A	B	C	D	E	F
Weight in ounces	21	23½	25	31	30½	26½
Centre of gravity distance from mid point of head in inches	3½	3½	3	2½	3	2½
Relative efficiency number of tests in which given axe achieved best penetration	0	0	2	12	7	5
Popularity number of persons stating preference for given axe	0	1	2	13	0	10

5



6



5 and 6 Chopping tests on the aluminium bar.

Design analysis

six it was chosen as the preferred version as often as the second or any subsequent axe. Apart from this aberration, preliminary tests had shown that when a given axe was used by the same person on different occasions, it generally achieved substantially the same penetration.

The effects of weight

When all the testers had stated their preferences it was found that the heaviest axe was the most popular, having been chosen by exactly half the experimenters. The lightest versions were the least popular, having been chosen by two, one and none respectively. The testers were not given an opportunity for observing the relative depths of penetration, but subsequent measurements showed that the relative efficiencies were in much the same order, with an important exception which will be referred to later. Curiously enough, although the *aggregates* of opinions and measured efficiencies were almost equal, the majority of individuals chose as their preferred models axes which were not, in fact, the most efficient in their own particular cases. There was one case in which the lightest axe appeared to have made the deepest penetration, but this was due to the surprising coincidence of a badly aimed blow falling exactly into a previous cleft. The results of this test were cancelled and the test was repeated.

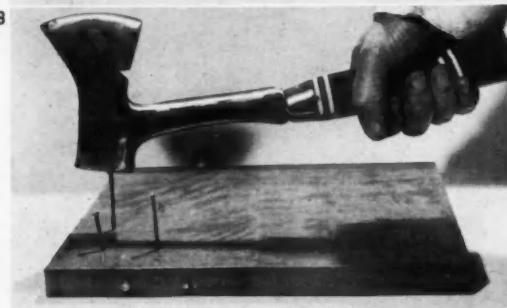
The position of the centre of gravity

Although there appeared to be a direct relationship between increased weight and increased cutting efficiency, the weight of the axe was not the most important factor in determining popularity. For example, model E, see diagram, although only half-an-ounce lighter than the heaviest and most popular model D, was not preferred by any tester. This result destroys an otherwise remarkably consistent pattern.

7 Used as a hammer the original axe brought the knuckles too close to the working surface.



8 With modified hammer-face angle, straight nail driving might be easier.

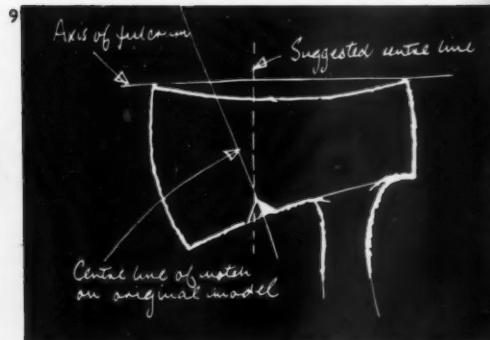


For a wholly consistent relationship, preference must be associated with the position of the centre of gravity. The unmodified Elwell axe had a centre of gravity positioned exactly three inches from the centre of the head. In two cases, one of which was the 'black sheep' model E, the position of the centre of gravity remained unchanged. In two others, the position had been moved $\frac{1}{2}$ inch and $\frac{1}{4}$ inch respectively further from the head. These four could only attract three votes between them. The most popular model D had a centre of gravity which had been moved $\frac{1}{2}$ inch nearer to the centre of the head. Model F was only a little over the average weight of the original axe yet it was a close second in popularity and efficiency to the heavy model D. Its centre of gravity had also been moved $\frac{1}{2}$ inch nearer to the head.

Accuracy of aim also appeared to be related to the position of the centre of gravity. In its original position blows tended to be struck slightly beyond the target centre. Taking the centre of gravity nearer to the head seemed to have the effect of bringing the blow nearer to the striker, and vice versa. The most accurately delivered blows were struck with model F whose centre of gravity had been taken $\frac{1}{2}$ inch nearer to the head.

Nail driving and drawing

When used as a hammer, the head in the original form was found to be at such an angle that the knuckles of the hand were in the same plane as the target, 7, and straight nail driving was difficult. In one case, 8, the hammer face angle had been modified to bring the knuckles clear of the plane of the target, but no valid conclusion could be drawn as to the effect of the change since the modified axe was also the lightest and had a changed centre of gravity. In the nail drawing tests the V-notch seemed satisfactory although the odd relationship between the angle of the centre line of the



9 Existing and suggested angles of nail-drawing notch in relation to fulcrum axis.

notch and the fulcrum axis was both mechanically undesirable and operationally a little awkward, 9.

Other characteristics

The original axe is covered with a rust-resisting transparent varnish, presumably to protect it on the retailer's shelf, since it quickly scrapes off when the axe is in use. For test purposes this was removed from half of each

ence must of gravity, centre of the black sheep' y remained been moved in the head. es between centre of rarer to the le over the was a close heavy model edved $\frac{1}{4}$ inch

ated to the al position the target to the head w nearer to those cent head.

original form knuckles of target, 7, and in case, 8, to bring the out no valid of the change t and had a awing test through the odd line of the

ee line

otch in relation mechanically ard, 9.

sisting trans- the retailer's axe is in use half of each

face. Two axes were exposed to the weather in the open air for a month. Two others were placed on top of a boiler. It was found that the varnish withstood both tests extremely well, but the steel where it was exposed rusted very quickly in the open air. The grade of steel was just about hard enough (42-44 Rockwell) for wood-cutting purposes, but was found to damage easily in contact with a buried nail, 10. The wood handle was extremely well secured. Almost every tester thought the original axe looked interesting and desirable. Two commented unfavourably on the painted decorative bands on the handle and one was disappointed to discover on closer inspection that the handle was not made of leather.

THE TESTS COMPARED

The laboratory tests seemed to confirm the original reasons for choosing this axe. The testers agreed that the first impression of the axe was interesting and created a desire to pick it up. Most critics, expert and amateur, felt that closer inspection aroused some questions as to the aesthetic qualities of the line of the handle and of the decoration. The removal of the decoration and the visual smoothing of the metal-to-wood joint were thought to be desirable in both enquiries.

The shortcomings in the feel of balance which were referred to in the subjective examination proved to be a major pre-occupation of the laboratory experiments, and both series indicated that the centre of gravity was too near the handle. Accuracy, which in the subjective tests was found to be attainable with practice, was found by the laboratory tests to be dependent upon moving the position of the centre of gravity.

The subjective critics referred favourably to the thin cross-section of the head and unfavourably to the shape of the handle from the point of view of grasp. These are valid points which failed to interest the laboratory workers. Neither subjective nor objective tests found the hammer head to be quite satisfactory, no doubt

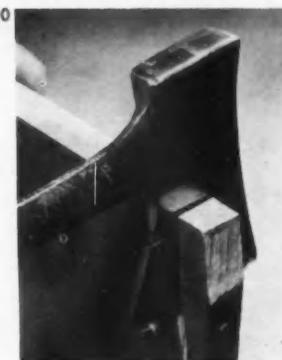
due to the low centre of gravity and possibly to the angle of the striking surface. The nail drawing notch also drew some mild criticism from both sides.

Conclusion

On the whole, the subjective approach seems to have revealed all the questions which the laboratory tests also uncovered, and one or two besides. The objective research scored, as usual, in giving quantitative answers. Although the two series of tests were conducted entirely independently, they attained a remarkable measure of agreement. The subjective tests succeeded in avoiding invalidation through non-typical circumstances, and the laboratory tests succeeded in pinpointing the commercially sensitive features. Indeed the outstanding feature of the tests was the unanimous verdict on the misplaced centre of balance.

To turn away from consideration of the tests and to return to the consideration of the Elwell axe itself, the following comments resolve themselves. The Elwell axe is, functionally, a good product. It chops well, but fails to do itself full justice at the point-of-sale. It may be very slightly on the light side - probably only 1½oz light - but it feels heavy because it is also a little out of balance. The centre of gravity should be at least $\frac{1}{4}$ inch and probably $\frac{1}{2}$ inch nearer the head. This also contributes to some reservations as to its qualities when used as a hammer. The shape of the handle in the hand contributes little to its selling qualities, and in prolonged use its lack of definite form results in some difficulty in maintaining a good grip.

In general the axe rises above the average level of its competitors, but leaves room for improvements in detail which would place it in a class by itself. Some of these details, such as the joint between metal stem and wood handle, while not affecting the efficiency of the axe, are particularly important at the point-of-sale where a tool of less efficiency could gain the customer's preference by its appearance and initial feel.



10 Axe striking buried nail.

Acknowledgement

The laboratory tests were carried out in the workshops of the school of industrial design, LCC Central School of Arts and Crafts, by kind permission of the principal, William Johnstone.

Edward Elwell Ltd comments:

The trouble that you have gone to in these tests is much appreciated and it is the type of thing that we here have neither the time nor the facilities to undertake and it throws a new angle on the product that we produce. The object of producing this type of hand axe was to put on the market a hatchet that was free from the usual defects of:

- 1 *The wooden handle breaking where it enters the eye of the axe head.*
- 2 *The wooden handle becoming loose in the eye due to shrinkage of the wood.*

It is not designed as a hammer and would be technically unsuitable for this in the true sense of the word. However, the hatchet is considered to be of a satisfactory nature for rough work which would be required in conjunction with the cutting properties of the hatchet, eg the opening and reconstruction of boxes or the splitting of timber.

The nail puller is not meant to be a competitor of the claw in a claw hammer. It is put on solely as a possible

asset for the pulling of nails from a piece of wood that is to be cut, or assisting in the opening of packing cases.

The remarks on the handle are interesting. The lines are put on for sales appeal. Leather and other types of handles were considered but the cost was considered to be excessive. We agree with your remarks that the junction of the wood handle with the metal shaft is somewhat unsightly. It is designed that way as it gives the handle a firm hold on the tool and for this the shoulder of the metal must be hard up against the slot in the ferrule.

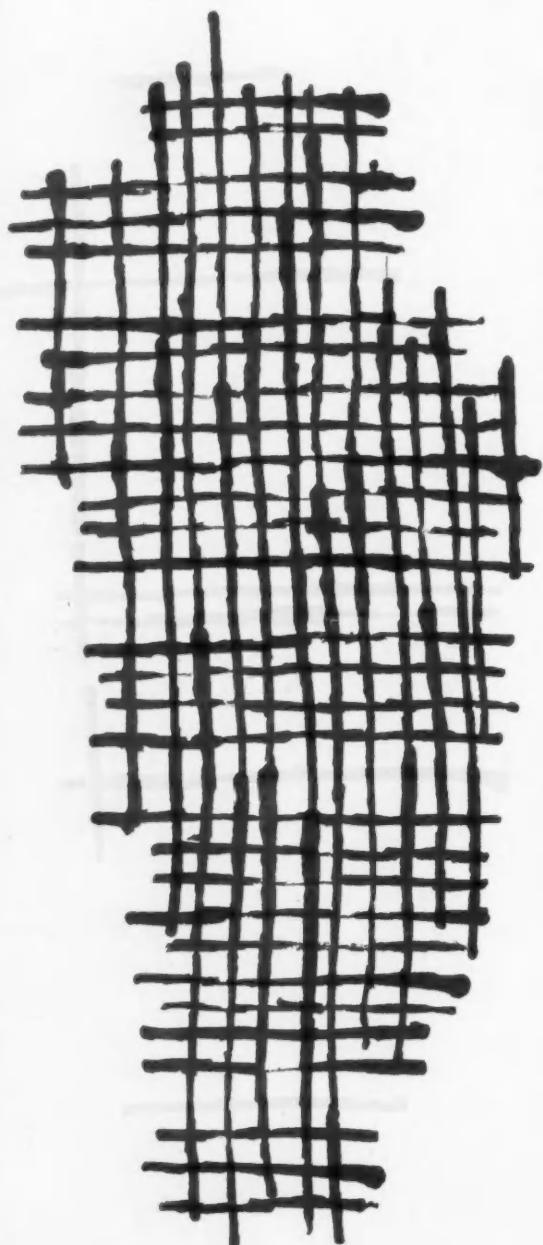
The question of balance to some extent depends upon the thickness required of the steel shaft. This is governed by strength. Some operators alter this balance by holding the handle in a different place.

In the main the tool has an appeal to carpenters, joiners and skilled woodworkers. No doubt it has its use as a household article but the price may be considered high for the majority of householders.

a survey of **FURNISHING FABRICS**

DAN JOHNSTON
Industrial Officer, CoID

The author analyses the varied approach to design shown by several leading manufacturers within the industry. He points out that each manufacturer has developed an individual design 'handwriting', and suggests that this may play an important part in maintaining exports if a European Common Market is established. The last survey of furnishing fabrics was published two years ago (DESIGN August 1955).



PERHAPS THE MOST SIGNIFICANT and encouraging feature of the British furnishing fabrics industry is the highly personal approach to design shown by individual manufacturers. In many cases the personality of the producer - the man who chooses the designs, organises their translation into cloth and finally supervises their sale is more evident than that of the designers he employs; again some designers are so surprisingly versatile that they can work successfully for producers whose ideas of good design differ greatly one from another. As a result, a wide variety of individual styles has developed within the British industry, and it is this, rather than the growth of a single national handwriting, which distinguishes our output from that of other countries.

With the prospect of a Common Market in Western Europe, this combination of high design standards with variety of style could be the decisive factor for the success of British trade in furnishing fabrics. It is well to realise, with all the publicity given to the progress of some newer industries, that textile production in one form or another still forms some 10 per cent of our export trade. The bulk output of cheap, simple fabrics has passed to a great extent to countries with a lower standard of living than ours. By hard necessity, therefore, our textile exports, of which furnishing fabrics form an important part, have become specialist products. Good sales depend on design content and technical excellence, rather than on price alone.

A lively variety in the furnishing fabric styles we can offer will, therefore, be very important to us when we face the challenge and the opportunity of a market of some 250 million people. While the smaller textile producers such as Sweden and even Italy can afford to develop specialised national styles, it is essential that we, as major producers, should develop and maintain more than one good style. The greater the number of specialised handwritings we have in our design ranges, the better will be our export prospects.

The aim of this survey is to analyse these various approaches to design within the British industry, and to illustrate some of the best designs from a number of our leading firms. It is not claimed that the standard of design throughout the industry is uniformly high. There are still too many watered down and ill-adapted traditional patterns on the market, as well as those uninspired designs which claim to be 'contemporary'. No design style, however good, can be allowed to stagnate, and the development of individual handwriting within a firm stimulates rather than cancels out the need for new ideas. Design is above all progressive, and new thought and the courage to apply it are always essential.

s developed
rtant part
st survey of

in furnishing
idual man-
chooses th-
sale is more
surprising
design diffi-
as develop-
ngle nation

ation of high
the success
cility given
rm or another
cheap, sim-
of living the
ng fabrics for
and on des-

ore, be vital
market of se-
and even in
as major pa-
er the num-
ll be our ex-

sign within the
er of our lead-
industry is un-
ditional pat-
contempor-
elopment of
ut the need is



Approximate retail prices per yard
are quoted, and include purchase
tax where applicable. Widths are
55/50 inches, unless otherwise
stated.

3 Warner & Sons Ltd is one of our foremost producers of high quality furnishing fabrics, and has successfully combined a wide knowledge and understanding of traditional English design with a feeling for new textures and printed effects. The work of American and Italian designers as well as British has been used in the print range of glazed chintz and heavier textured fabrics, and for the woven fabrics a notable team of staff designers is headed by Alec Hunter, president of the SIA.

'Vases', a chintz of American design. £1 6s 11d.

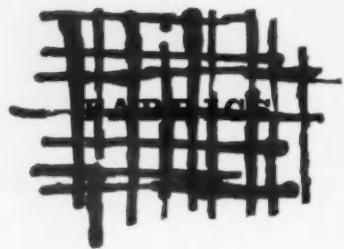
Table by Furniture Industries Ltd; biscuit jar by C. H. Bramnam Ltd.

3



1 and 2 Tootal Broadhurst Lee Co Ltd - furnishing fabrics form a relatively small proportion of this large organisation's total output, and those that are produced are mainly intended for sale in the small drapery shop rather than the specialist furnishing store. However, the enlightened attitude to design which is apparent throughout Tootal's production ensures that design standards in these cheaper fabrics are not neglected. An interesting new development in recent years has been the introduction of a screen printed range of furnishing fabrics for export and limited home distribution. These fabrics are varied and forward-looking and may form a new basis for progress in the firm's cheaper ranges.

1 'Arlequino', left, a screen print available on spun rayon satin or plain cotton. DESIGNER Contessa Friedlinde de Cobertaldo Dinze. 19s 11d. **2** 'Habanera' in spun rayon or cotton. DESIGNER James A. Morris Designs Ltd. 19s 11d.



4 Henry Nathan & Co Ltd shows an enterprising approach to design and this can be seen in its range of linen and cotton prints and heavy texture upholsteries. The firm has gained a reputation for the high quality of the materials it produces, and the designs are of an equally high standard, whether they are derived from traditional or purely modern sources.

4 'Magnolia', a screen print on a heavy cotton satin. DESIGNER Gwenfred Jarvis. £1 7s.

5 and 6 Sanderson Fabrics - as a large manufacturer chiefly engaged in the production of higher priced materials, this firm exerts a considerable influence on the furnishing fabrics industry. The Courtauld Sanderson 'Ancestral Fabrics' collections, produced during the last 10 years, were traditional in inspiration, and based on a historical approach to design. This attempt to recreate period styles in modern fabric constructions may not always have been successful, but at the same time Sanderson's has not failed to encourage new thought; artists and well known designers have been asked to produce patterns in a modern idiom, and as a result some very interesting fabrics have been introduced.

5 A heavy bark weave, left. £1 4s; 'Bullrushes', right, a screen print on mercerised cotton satin. DESIGNER Richard Guyatt. £1 11s.

6 A cotton and rayon repp. £1 8s.





9 **David Whitehead Fabrics Ltd** was the first of our major producers to prove that good modern designs would sell in quantities large enough to seem important in Manchester, and the firm's inexpensive roller prints retain that gay and colourful quality that earned the firm its early successes. In the last few years, however, Whitehead's most important contribution has been the extension of its screen printed range of prestige fabrics, to which many leading artists and designers including John Piper and Louis le Brocq have contributed. Bold and colourful designs are characteristic of both the prestige ranges and the less expensive fabrics.

Three screen printed fabrics. DESIGNERS (from left to right) Françoise Lelong, Louis le Brocq and John Piper. £1 9s 11d - £1 9s 11d. Linen basket by Standish Taylor Ltd.

9



7 and 8 **G. P. & J. Baker Ltd** combines an understanding of the best in traditional design with all the benefits and refinements of modern techniques in the production of its chintzes and linens. The inspiration for these fabrics is clearly drawn from the past, but the colourways, and in some cases the designs themselves, have been carefully reconsidered and redrawn, so that, slightly nostalgic in feeling, the fabrics have a charm which is very much their own.

7 'Cherry stripe', a chintz. 12s 6d (width 31 inches).

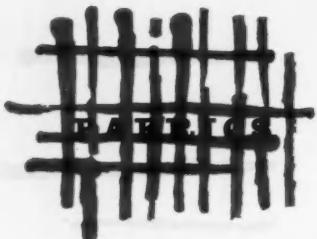
8 'Waratah', a heavy linen. £1 7s. Stool by Primavera (London) Ltd.

9 **Conran Fabrics Ltd** is a recent entrant to the trade, and in its first collection the firm has introduced a style of design that has not been attempted by the established firms. Cool and austere, and showing a definite Swedish influence, these fabrics are very much in keeping with current taste in furniture and furnishings. The printed velvets that are included in the range are of a very high standard, and make a notable contribution to British fabric design.

Tree section', left, and 'Zuleika', right, available on linen union or linen voile. DESIGNER Shirley Conran. £1 5s 6d (union), £1 12s 6d (voile); printed velvet, centre. DESIGNER Terence Conran. £2 6s 6d.

10



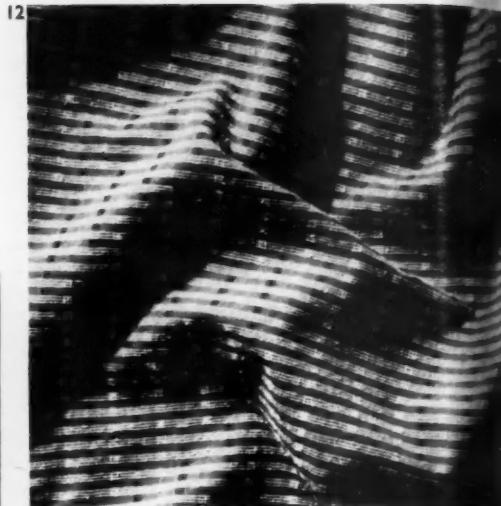


11



11 Lister & Co Ltd is famous for its velvets, and during the past few years the firm has brought a freshness of colour and variety of texture to this material. Colour in furnishing fabrics has perhaps never been used so imaginatively as it is today, and there is a great scope for this exploitation of the depth and richness of velvet. The firm has also introduced new ideas of texture and pattern into its latest ranges of tapestry weaves.

'Westminster', above, a plain cotton velvet, and 'Richmond', below, a slub rayon velvet; 'Lurex' is used in the woven fabric, centre. Above £1 12s 6d; centre £1 1s; below £1 17s.



12



12 and 13 Turnbull and Stockdale Ltd - the chief characteristic of this firm's range is its great variety, both in type of fabric and design content. Dobby weaves are produced for low priced but hard wearing coverings, and the firm's glazed chintz range is one of the most interesting on the market, since it includes modern designs as well as traditional patterns. A large proportion of the firm's production is devoted to roller and screen prints on cotton and linen. These materials range widely in style and price, and many are very modern in feeling.

12 A dobby weave in hard wearing cotton. 18s 11d.

13 'Harlequin', a rough textured cotton. DESIGNER Philip Stockford. £1 1s.



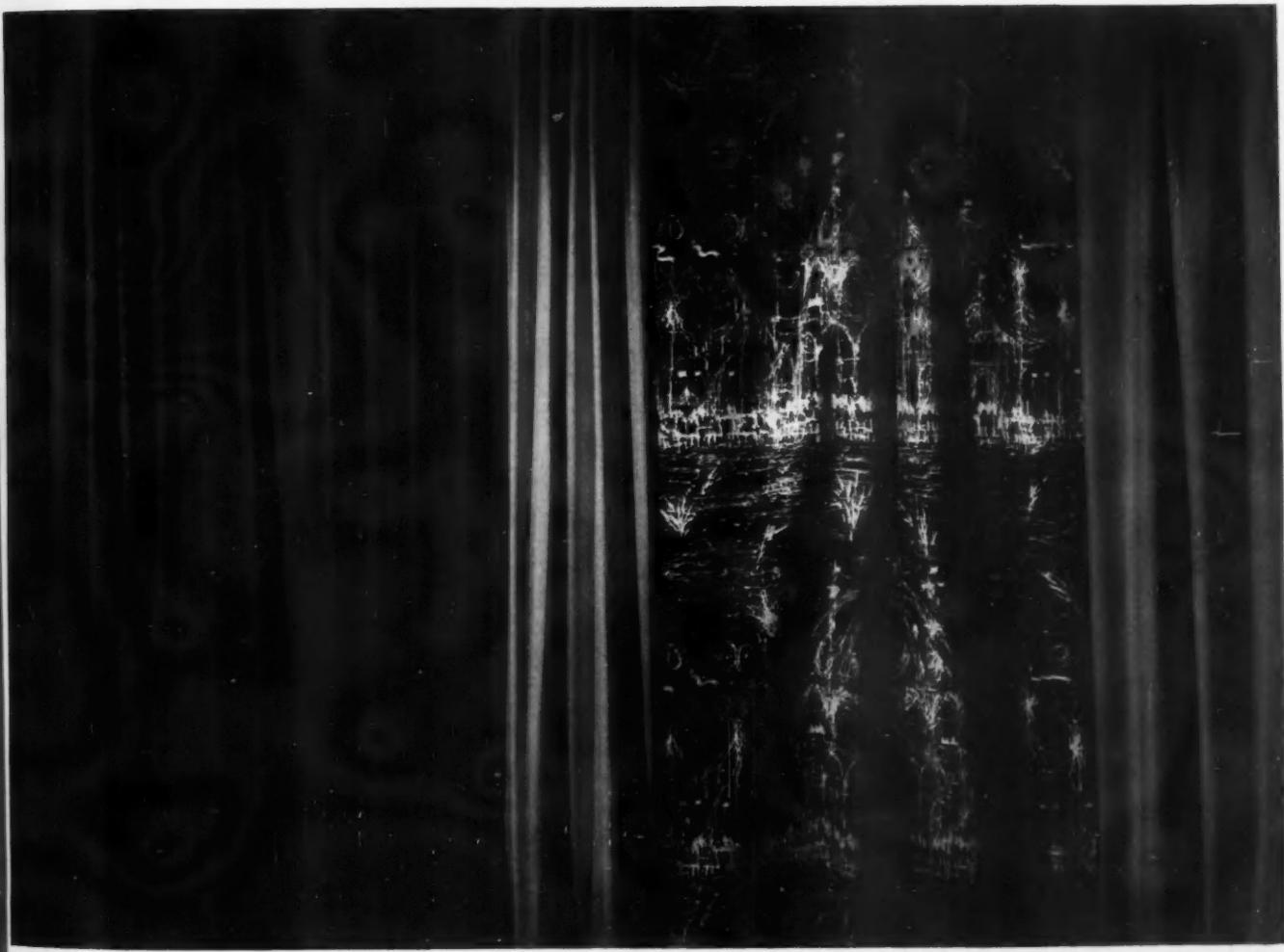
14 and 15 **Gayonnes Ltd** - there are always one or two designs in this firm's range which breathe the spirit of adventure. However, the true basis of Gayonnes' design policy can be found in the firm's understanding of the value of colour in furnishing fabrics, and it is significant that the first group display of textiles from one firm to be shown in The Design Centre was Gayonnes' 'Gaymod' range of 30 plain dyed shades. The colours of Gayonnes' prints are carefully chosen so that they can be paired up with the plain dyes to form what the firm calls 'Room Mates'. The chief characteristics of the prints are their gaiety and friendliness, which should not be allowed to disguise their originality and the new thought that goes into them.

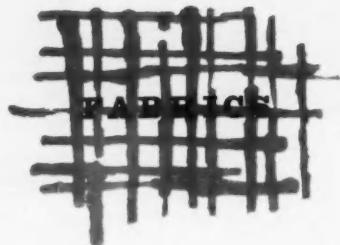
14 'Fun', left, a machine print with a check border. DESIGNER Fiona Niven. 6s 11d; 'Barrier Reef', right, a screen print. DESIGNER Beryl Coles. 10s 9d.

15 'Gaiety', a fine line print shown here with some of the 'Gaymod' colours. DESIGNER 'Gaiety', Beryl Coles. £1 1s. Plain cottons. 10s 11d.

14

15





16



16 Morton Sundour Fabrics Ltd – the basis of the foundation of this firm was Sir James Morton's determination that colours on furnishing fabrics should be fast and be guaranteed so. The firm's latest venture relates also to colour in the service it has worked out with Carpet Trades Ltd to provide carpet colours that blend with 'Sundour' furnishing ranges. As a bulk producer, catering for a wide market, Morton Sundour's approach to design is necessarily more restricted than that of its associate Edinburgh Weavers. However many well known designers have contributed to the firm's ranges, from C. F. A. Voysey in the past, to Enid Marks and Humphrey Spender in more recent times.

'Drimona', a heavy weave made from spun rayon and cotton, and 'Vienna' a 'Terylene' marquisette. Weave 19s 6d; net 12s 9d.

17



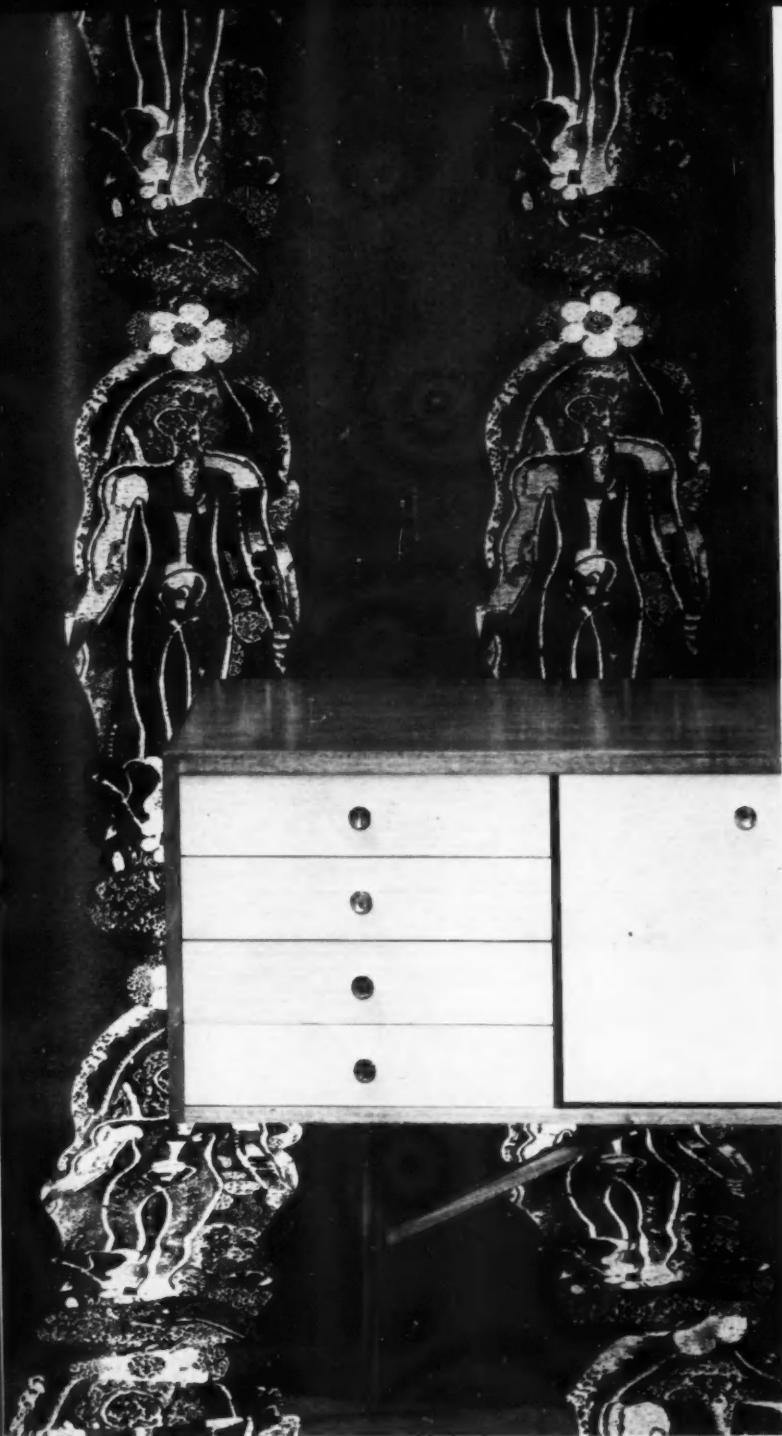
18



17 and 18 Heal's Wholesale & Export Ltd has made a most significant contribution to fabric design in recent years, and the firm's handwriting is unmistakable. Simplicity, full furnishing scale and clear, fresh colours are the keynotes of the fabrics; it is characteristic of this progressive firm that the designers are given full credit. The fact that a proportion of each year's range of new designs is roller printed, so that Heals can offer first class designs at moderate prices, points to the firm's confidence in the public's appreciation of good design.

17 'Daffodil', a screen print on rough cotton. DESIGNER Mary Maron. 19s 3d.

18 'Magnetic', left, and 'Tarn', right, two designs on plain strong cotton. DESIGNER Lucienne Day. 11s 9d. Chair by S. Hille & Co Ltd.



19

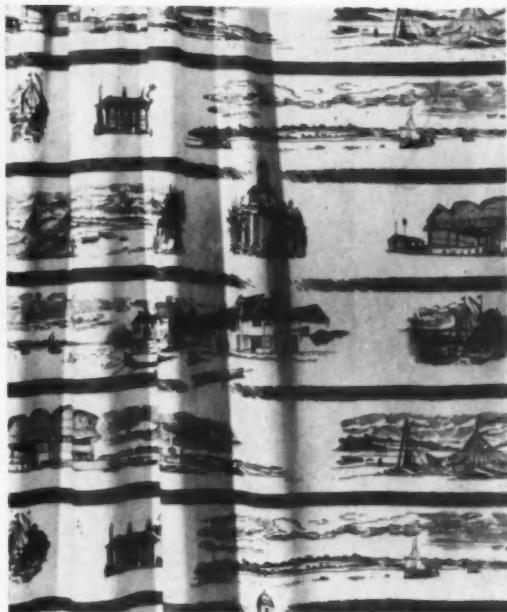
19, 20 and 21 Edinburgh Weavers was founded in 1929, and almost from the beginning has been directed with admirable consistency by Alastair Morton. It has been his ambition to introduce the work of prominent artists into textile design, and his success is due to his own ability as a designer, combined with his sympathetic understanding of modern artistic trends. Under Mr Morton's directorship, Edinburgh Weavers has produced printed and woven fabrics of the highest standard, many of them designed by artists who are better known for their work in quite different media. The firm's ability to translate such work into fabric has been a major contribution to modern textile design.

19 'Adam', a woven fabric. DESIGNER Keith Vaughan. £5 10s. Sideboard by Archie Shine Ltd.

20 'Essex Coast', available on plain or 'Everglaze' cotton. DESIGNER David Gentleman. 13s - 15s.

21 'The Great Reed', a glazed chintz. DESIGNER Hans Tisdall. £1 12s 6d.

20



21





22



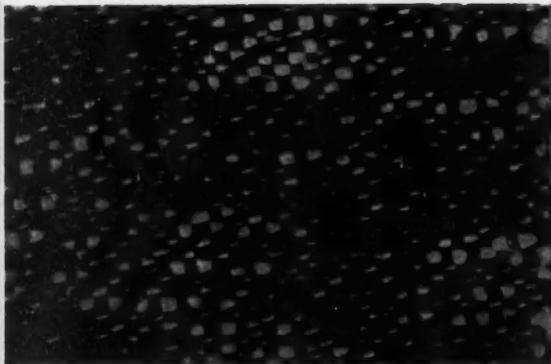
22 W. Foxton Ltd was one of the pioneers of textile design in the 'twenties and 'thirties, and although the firm's attitude is more conservative today, there is still a feeling of experiment and new thought in its output, especially in the heavy textured woven materials produced in recent years.

Cotton textures in good colour ranges. 19s 6d (top), £1 1s (bottom).

23



24



25



26



23, 24, 25 and 26 Donald Brothers Ltd produces fabrics that are attractive and individual, and the firm's design handwriting, which is easily recognisable, is in part derived from its association with linen weaving rather than with cotton or rayon. Although in its characteristic heavy textured weaves Donald Brothers uses wool, cotton, rayon and jute, the slightly homespun look of real quality that the fabrics achieve is akin to the starting point of linen. This same feeling of high quality achieved without ostentation or striving for effect is also characteristic of the firm's print range.

23, 24 and 26 'Morar', 'Barra Crash' and 'Renoir'; three mixture textures. DESIGNER Peter Simpson. Top £1 16s; centre £1 11s; bottom £1 8s.

25 Three linen type fabrics - 'Crinan Check', left, 'Dunure Gauze', centre, and 'Bamboo II' right. DESIGNER ('Bamboo II') Frank Designs Ltd. Left £1 8s; centre 13s; right 16s 9d. Table by A. Younger Ltd, and lamp by Troughton & Young Ltd.



27

27 Liberty & Co Ltd's reputation is based on the high quality and individual character of its traditional linen florals and other printed fabrics. In recent years, however, it has been the 'Young Liberty' ranges, bold and full blooded in pattern and colour, and produced in bulk so that they can be offered at economical prices, that have had the greatest impact on fabric design. This is a notable instance of a firm successfully introducing a design handwriting that is entirely different from its inherited tradition. 'Cockfosters', left, a cotton print. DESIGNER John Wright. 11s 9d. 'Bourges', right, a heavy linen. DESIGNER A. L. Prinsep. £1 4s 9d. 'Ripple', foreground, a rough textured cotton. DESIGNER Frank Designs Ltd. 18s 9d. Chair by Kandyia Ltd.

28



28 F. & D. Wilson Ltd sets out to produce fabrics at economical prices, and has introduced some very interesting weaves from spun rayon yarns and cotton condensers. This initiative within tight limits has given the firm a special reputation for design ingenuity.

A weave with a dobby effect, left, and a Jacquard weave, right. DESIGNER Joseph Law. Left 12s 11d; right 18s 11d.

Review of current design

A selection of items recently accepted for inclusion in 'Design Review', the CoID's photographic and sample record of current well designed British goods. 'Design Review' forms an essential part of The Design Centre, 28 Haymarket, SW1, which is open on weekdays from 9.30 am - 5.30 pm.

All retail prices quoted are approximate and include purchase tax where applicable

1 Arm chair made of natural wax finished beech. Foam rubber seat and back cushions have removable zip on covers. The seat is upholstered with 'Pirelli' webbing. DESIGNER L. R. Ercolani. MAKER Furniture Industries Ltd. £20 12s 6d.

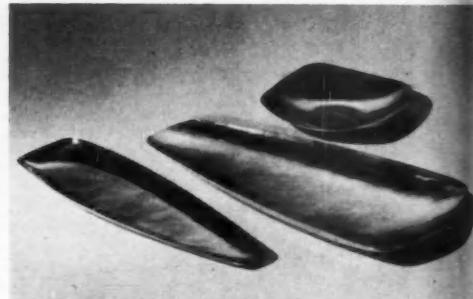
2 Travel bag made of fawn, black or navy mohair with pigs skin or coach hide trimmings and moire rayon lining. MAKER Finnigans Ltd. £15 15s.



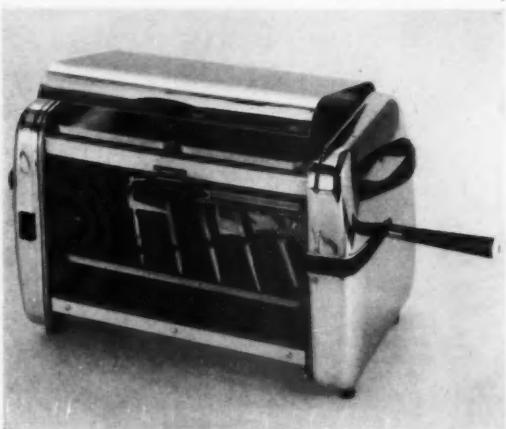
1



2



3



4

3 Entrée and hors d'oeuvre dishes in stainless steel; the upper surfaces are highly polished, and the undersides are satin finished. DESIGNER and MAKER John Grenville. From left to right £2 17s 9d, £4 6s 3d, £2 0s 3d.

4 Infra red rotary spit, incorporating automatic timer. The spit is chromium plated and the spatter shield is in heat proof glass. The hot plates can be used for frying or plate warming, and the tray is adjustable for toasting, roasting, or grilling. MAKER The Brattel Electric Co Ltd. £34 17s 6d.

ted
clude
dicable

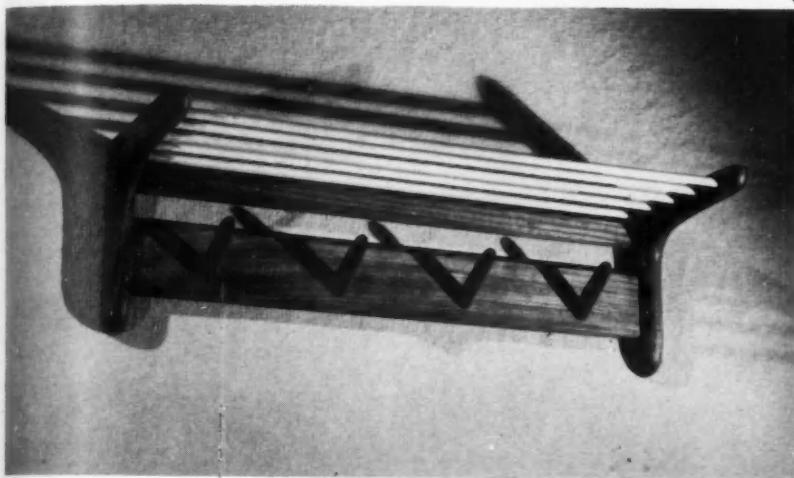
natural wax
rubber seat
are removable
it is up-
webbing.
ni. MAKER
d. £20 12s 6d.

fawn, black
igskin or
and moire
Finnigans Ltd

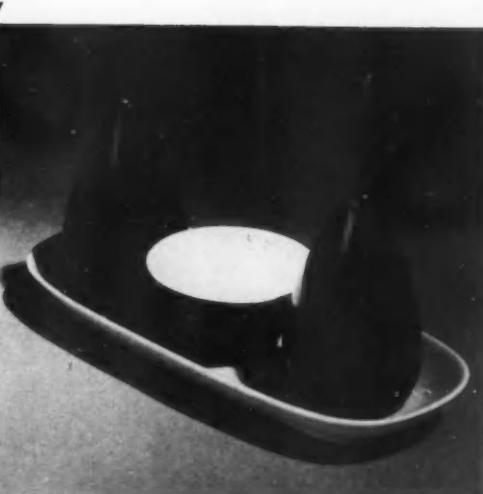


5

5 'Melaware' plastics bowls, available in a variety of gay colours. MAKER Ranton & Co Ltd. Salad bowl 9s 6d, soup bowl 4s 3d, sugar bowl 3s 9d.



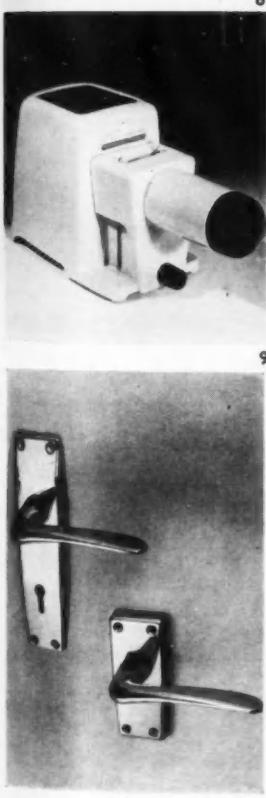
6



7



10



8



9

7 Condiment set, in bone china. DESIGNER Tom Arnold. MAKER Ridgway Potteries Ltd. Price from maker.

8 Home projector for 35 mm or 828-size transparencies in prepared 'Kodaslide' mounts. The projector, finished in beige, is 12 inches long and is suitable for AC or DC current within specified voltages. A 150-watt lamp is fitted. MAKER Kodak Ltd. £10 10s (lamp £1 1s 9d).

9 Lever door handles available in bronze or chromium plated finish. Heights of back plates are 6 inches and 3½ inches. MAKER Frank Allart & Co Ltd. Left 10s 6d (bronze), 12s (chromium plated); right 9s 3d (bronze), 11s (chromium plated).

10 Cane chair with wood and metal frame. DESIGNER R. R. Matthew. MAKER Scottish National Institution for the War Blinded £6 10s.

House styles evolving

ALEC DAVIS

For one manufacturer a house style begins with improved package designs; for another, and for an important trade association, with booklets. Their different approaches to the problem are reviewed here and on the following pages.



Reeves & Sons Ltd

Because Reeves' products are artists' materials, it is only logical that they should be presented and publicised in a style which an artist need not be ashamed of. At various times since the firm was founded (1766) and more particularly in recent years, various designers have 'had a go', but until now they have scarcely done more than scratch the surface of a range of products that includes about 6,000 items.

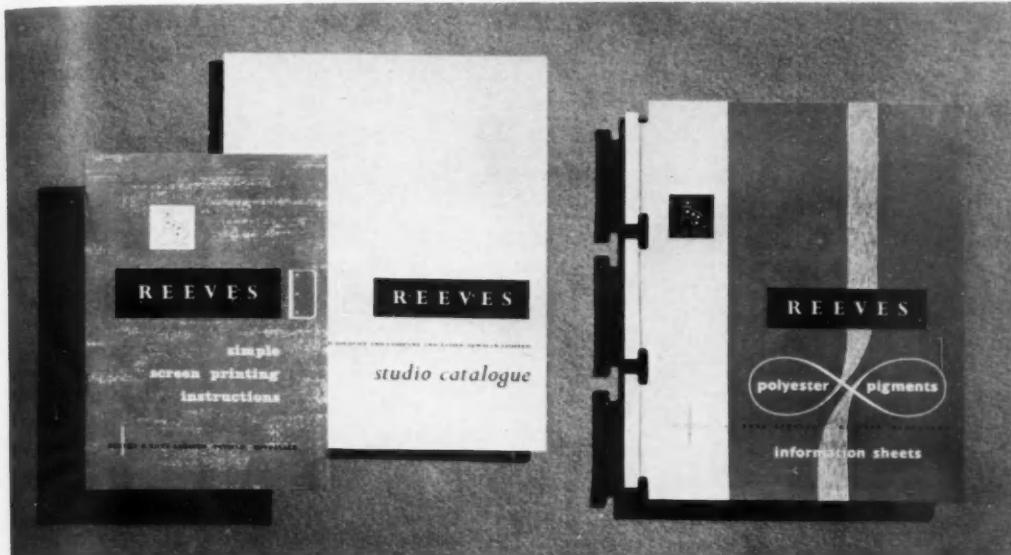
Now, a general redesign programme has been put in hand with the conscious aim of giving a recognisable style to everything connected with the firm. Unlike most house styles, this one was not conceived in a sales or advertising department but on the manufacturing side - as packaging,

in this company, comes within the province of the works director, Donald Simmons. The programme began with package design, but it has already brought in such diverse items as paintboxes, catalogue covers, Reeves' postal franking device, and enamelled wall signs for use outside customers' shops. (While the desirability of external projecting signs may be a matter of opinion, it cannot be doubted that Reeves' is far more seemly than most of its kind.)

A feature of all the designs is the standardised lettering of the company name: it is an adaptation of Perpetua Bold capitals. The designer concerned, Douglas Evan-Cook, has evolved the new logotype - which incorporates a black

background wherever appropriate – around a name panel which was in use on a few lines at the time when he was called in (as a result, incidentally, of a recommendation from the CoID Record of Designers). He has also designed a number of symbols for various sections of Reeves' vast range of products – a squeegee for screen printing sets and a pattern of flowing colour for the new polyester pigments as well as brushes for oil and water colours. These symbols are in most cases in white line against solid colour.

Sections of the range are also distinguished by different typographical styles for their descriptive titles, as in the three booklet covers below; a relief from the strict standardisation of the company's name.



W. Lucy & Co Ltd

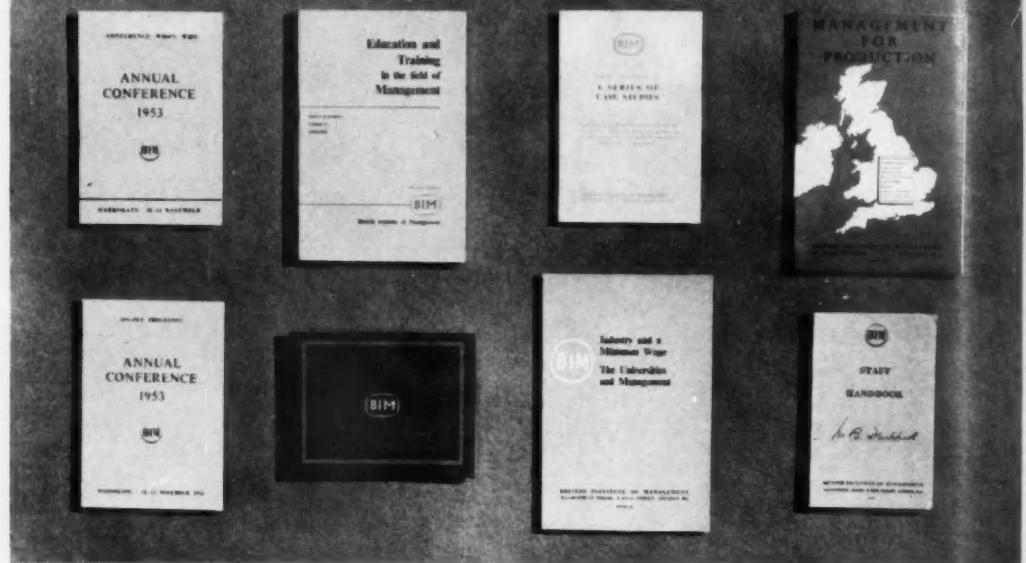
Lucy's of Oxford has its roots deep in the history of ironworking – 200 years down, in fact. This long established business has shown welcome modernity in commissioning London Typographical Designers to tidy up and give some character to its printed matter.

Lucy's present-day products – electrical switchgear and distribution accessories – are such that their design is almost wholly determined by technical considerations. This does not mean that their appearance can be neglected, but it does imply that there is less scope for visual character in them than in the publicity material associated with them; which adds point to Lucy's decision to break with tradition by calling on the services of professional print designers. First evidence of a house style evolving as a result of this step is contained in two new sectional catalogues and, extreme right, a descriptive picture book whose cover design is derived from the sign of Lucy's Eagle Ironworks.

A panel of distinctive shape is used to frame the name and main headings in these publications, and the use of Falstaff and Bodoni Bold for display lines gives typographical consistency. Squared-up backgrounds of various solid colours relieve the monotony of cut-out half-tone illustrations which are still typical of too many engineering catalogues.



House styles evolving



Earlier publications of the British Institute of Management.

Recent designs by Richard Chaffe for the BIM.



British Institute of Management

Publications of the BIM, a few years ago and today, make as telling a series of before-and-after pictures as any design propagandist could wish to find.

The new publications, moreover, exhibit a house style of the less obvious kind – not the result of standardisation in typeface, colour, or format but the natural outcome of using consistently the services of one designer (who, in such circumstances, may or may not be conscious of the fact that a recognisable style is evolving in his work).

The excellent earlier designs by Stuart Rose for the Federation of British Industries have clearly been a source of inspiration for the BIM, whose print is designed by Richard Chaffe, its print production manager. For the fact that the institute *has* a print production manager, much of the credit is due to Philip Dyer, who was editor-in-chief of

Management Publications Ltd at the time of Mr Chaffe's appointment in 1953.

As the illustrations suggest, the BIM house style is now evident in small print jobs as well as publications. It has an example which many trade and professional associations ought to follow: there are few among them whose house style – in printed matter, premises or publicity – suggests a glow of pride in the interests they represent.

Recent reviews of house styles in other journals include: 'Take your choice' (H. J. Ryman Ltd, multiple stationer) 'Sales Appeal' September–October 1956; 'Character in a rectangle' (Harrow Nichols) by Harry Ballam in 'Advertising Review', Vol III, No 9 'The Glamour of Tradition' (Fortnum & Mason) in 'Graphic' No 66, 1956.

Furnishing by hire purchase

DOROTHY MEADE

A REPORT HAS RECENTLY been issued by the National Council of Social Services on 'Hire Purchase and Credit Buying'.* It does not criticise the principle of deferred payments as such, but recognises that for many families it is inevitable. Its purpose is to reveal the many pitfalls which waylay the unsuspecting customer, and to safeguard the interests of householders.

Apart from the main problem of relating hire purchase commitments to household budgets as a whole, which leads so many families into money troubles, the report is greatly concerned with the question of careful furnishing of the home, and with that arch enemy of planned economy, high pressure salesmanship.

This is seen at its very worst on new, isolated housing estates where families depend mainly on mail catalogues and travelling salesmen for their choice of furnishings. Here the scope for enterprising and unscrupulous furnishing firms to cash in on the inexperience and low sales resistance of their clients is endless. I saw this for myself when I visited the Hartcliffe housing estate near Bristol. I interviewed a number of families and spoke to a welfare worker who knows most of the homes on the estate, where the majority of tenants buy entirely on hire purchase. Here, undoubtedly, the trump sales card was "keeping up with . . . " or "going one better than . . . the Joneses". I came across the same three-piece suite, the same glass fronted cabinet, even the same vases and ornaments (or slight variations on the theme) as I followed in the wake of the salesman. Purchases seemed quite unrelated to real needs in many homes. The case of a family – on another estate – which was persuaded to buy a cocktail cabinet (with an automatic light in the lid although the house had no electricity) and kept bread in the cabinet is admittedly extreme, but it serves to show just how far this method of selling can lead people astray. And many door-to-door salesmen make no scruples about pestering busy housewives, one foot firmly planted inside their door, until the easiest way to get rid of them is to pay 1s 6d for, say, a gigantic teddy bear (and then 1s 6d weekly for months to come). Consumer needs are a figment of the salesman's imagination.

Appeal at sight

Furniture made almost exclusively for the hire purchase market is designed to appeal at sight or by a catalogue illustration to the maximum number of retailers, buyers, salesmen and lastly purchasers. Here

*Copies can be obtained from the secretary, NCSS 26, Bedford Square, WC1, price 2s 10d including postage.

CONSUMER NEEDS 6



Gloss and glitter furniture attractively priced to lure the unwary shopper. This view has its partners in retailers' windows throughout the country. Photograph by John Garner.

we have the furthest possible remove from the ideal situation of the single craftsman-designer working for one client only. With furniture mass produced for this market an entirely false set of values is imposed. The furniture is for show – ostentatious, ornate and polished to a mirror finish. Its usefulness in the home is seldom a major consideration.

The hire purchase system is enabling far more people to buy more new furniture than ever before, and nowadays there is thought to be a stigma attached to buying second hand. It also means that the decision to buy may be taken in a moment, when an entire dining suite can be yours for only 9s.

Although nearly every furnishing retailer now adopts deferred payment terms, the less informed, less intelligent section of the public turns to the shops which sell their wares the loudest and appear to offer the biggest bargains. A discreet and beautifully lettered

card in the window explaining deferred payment terms does not bring timid new customers inside the shop in nearly such numbers as, for example, a window display like those also illustrated here.

A gain for the retailer

One big advantage to retailers of hire purchase sales lies not in the small extra charge, but in the fact that most of their customers must keep coming into the shop each week. I was interested to hear from one retailer that whereas the five per cent service charge barely covers the additional staff work involved in hire purchase payments, over 50 per cent of the total sales result from further sales to regular customers who see something else when they come in to pay their weekly deposit.

Well informed opinion estimates that between 60 and 75 per cent of all furniture retailed in this country is sold by deferred payments, and those who doubt their own judgment depend on the advice of neighbours and the experience of salesmen to meet their furnishing needs which, in fact, only they themselves can really know. Without hire purchase they could not buy new furniture on anything like the same scale. But with it must also go a real discrimination and understanding of their own problems. The report of the National Council of Social Services rightly emphasises the very great need for further education in budgeting for and furnishing the home. Education in this sense becomes a duty. For so long as most hire purchase customers are docile enough to be misled whenever they enter a retail store, the general standard of furnishing is likely to suffer through the acceptance of poor and unsuitable designs.

ABOVE RIGHT Selling furniture as an investment, with its usefulness as a secondary consideration. RIGHT In a large window this retailer's notice makes its point, but allows the furniture to speak for itself. Photographs by John Garner.

BELOW One attempt to get a favourable decision from the customer. The type of furniture offered in this catalogue - though depressing enough - is not discussed: the point that matters is the price per week.

42

DESIGN

Overseas Review

Long range planning for tomorrow's kitchens

USA

American domestic appliance manufacturers are looking forward to technical achievements in the nineteen eighties in their attempt to plot the course of kitchen developments in the intervening years. The following article describes the increasing weight of opinion in the USA in favour of research into the real needs of consumers in the future, to replace an earlier belief in the validity of an artificially contrived programme of obsolescence.

'THE KITCHEN' is a term that is assuming a new significance to leading appliance designers and manufacturers in the USA. Many products, such as refrigerators or washing machines, that in Europe are still regarded to some extent as luxuries, have almost saturated existing American markets. Artificial obsolescence which most firms have adopted as an immediate way out of the appliance glut is slowly being recognised as a temporary palliative that will no longer satisfy conditions in 10 or 20 years' time.

It is hardly surprising therefore, that the future of the American kitchen has come in for a great deal of soul-searching and discussion among designers. Conferences and symposia have been held by consultants and manufacturers. On the one hand, experimental kitchens incorporating hitherto unheard of luxuries have been built and exhibited to whet the public appetite for more practical but less ambitious innovations; on the other, market research campaigns have been carried out to find out what the American family really needs. Now, after the publication of many conflicting ideas and reports, a clear pattern of development is beginning to emerge with a design philosophy that recognises the role of the consultant as a key person in long term product planning.

Programming future designs

One of the leading designers who has devoted considerable attention to this problem is Dave Chapman, whose work for International Harvester Corporation and other firms has taken him progressively away from the design of individual products to the study of forward design programming. Mr Chapman's point of view is stated concisely in his own words from an address to the Institute of Appliances Manufacturers: "... In asking the question which is uppermost in your minds - that is 'where is the appliance industry going?' - we can hardly take a short-sighted view toward new lines of merchandise. It is a logical and proper assumption that a profitable position is not earned by an industry in a single year or two, but rather, as the result of careful, long range planning by

intelligent management dealing with facts and calculated objectives. If we wish to know our next logical move, it is also necessary for us to know the move beyond that. If you want to plan intelligently, you had better have a good idea of where you want to be as a company and an industry in 1960 or 1967."

Consultant on consumer needs

Later Mr Chapman outlined the type of approach that is necessary: "... You can either try to create new markets by creating 'synthetic obsolescence' by giving your old products new faces (which is 'styling'), or you can use the potential creative genius of the American industrial system to create completely fresh, untouched markets with new products to serve new functions (which is in large part 'design')." In order to achieve this latter aim, as he states elsewhere: "... I am convinced that the search for successful product development does not start with a study of manufacturing processes, merchandising techniques, cost accounting or analysis of competitive merchandise . . . the industry must get to the roots of the problem and study people and their way of living . . . industrial management must go back to some extremely basic and fundamental questions: who is going to buy and/or use the product?; where is the product going to be used?; how is the product going to be used?; what must the product do?; what elements beyond the 'use' factor must be considered?"

This concern to seek out a new direction through a return to basic principles, rather than continue with an annual face-lift to an existing product, is in itself dependent on present and future technical developments. Designers realise, though not sufficiently according to Dr William Bradley, research director, American Institute of Baking, that new developments in food processing and packing, for example, will entirely alter our conception of what these basic principles really are. At a recent symposium organised by the American Society of Industrial Designers he stated: "... The designer of kitchens had better watch his step. The food industry is doing its best to sell the housewife on frozen pre-cooked meals which are served on a tray that can be thrown away after use. All that the housewife needs is an electric oven to warm the food in a jiffy. She will not need the time-saving kitchens, since the food processor will have saved the housewife the time already." As Mr Chapman has stated: "The appliance of tomorrow will be used to complete the job of preparation begun by others, or do the entire job automatically. In many cases the





1



WHIRLPOOL

One of the latest examples of domestic automatism is the 1957 'Miracle Kitchen' by the Whirlpool-Seeger corporation. This kitchen, which has been on tour in the USA, has been designed, in the firm's words, "to demonstrate possible future mechanical kitchen innovations that are in various stages of development". The general view, 1, shows the open plan with the kitchen forming part of the general living area. Natural wood and coloured panels for the base cabinets are used throughout so that the kitchen elements are indistinguishable from the general living room fittings. Refrigerators, storage shelves, electronic ovens, sinks and so on are normally concealed and move down automatically from

3



wall storage cabinets, 3, or out from the base cabinets to convenient working heights. A mechanical floor scrubber and polisher, 1, bottom left, a mobile serving cart which moves automatically from a dishwashing mechanism in the wall to the dining table, 2, and many other operations, are controlled from the planning centre, the 'heart and brain' of the kitchen which enables recipes to be selected and cooked by the touch of a button. To make sure that the housewife is not missing any fun there is a revolving television monitor which enables her to keep an eye on the rest of the house. The area is lit by diffused lighting which can be changed in colour and intensity to suit the mood of the moment.

appliance must *warm* instead of *cook*, *brown* instead of *bake*, and work *automatically* instead of *manually*."

Another development which may have a widespread effect on product design is the use of gamma irradiation to preserve food for longer periods and at higher temperatures than are possible with the conventional refrigerator or freezer. Research into this process has been carried out for a number of years at the University of Michigan, sponsored by the Kelvinator Division of American Motors Corporation. The first application of this research in a domestic context was seen recently in the Kelvinator 'Atoms for Living' experimental kitchen designed at the request of the Monsanto Chemical Company to meet the needs of its plastics 'House of the Future' (see page 46). Other universities have carried out research into the human and technical problems of kitchen design and reports have been published by the Universities of Illinois and Cornell.*

Changes in marketing techniques and more remotely domestic architecture are already affecting the appliance business. Lazette Van Houten, DESIGN's American correspondent, writing from New York states: ". . . The trouble is that the average retailer today cannot keep alive on the sales resulting from a typical appliance operation - the sales of single items. There have been cut-throat price competition, discount house operations, inventory problems, design obsolescence, re-built product complications, and a host of difficulties inherent in hard goods merchandising for replacement markets. Builders and contractors have skimmed the cream off the business. They are in a position to get price differentials from manufacturers because they find that the 'dream' kitchens, installed to help sell their houses, are indeed the dream of every American housewife. The average retailer has been in no position to compete. The headaches of planning, of design, of installation, are too painful. So he is out of the market that offers the biggest financial rewards."

Kitchen equipment sold with house

It is then the builder to whom the appliance makers are turning as their chief customer. And since the builder is anxious to avoid the time and cost of elaborate installations, appliance makers are giving increasing attention to the packaged kitchen - a complete kitchen sold ready to take its place in a new house as an integrated prefabricated unit. General Electric's 'Kitchen Centre', with its permutations of equipment and colour combination, was the first practical step in this direction and was described in DESIGN for July 1956. Another recent example is the enormous Borg-Warner International Corporation's new department to co-ordinate the supply from a central source of a wide range of household appliances and building materials, ready for assembly by the builder.

The appearance of the packaged kitchen, conceived essentially as an architectural component, has strongly influenced the design of individual equipment. Several ranges have appeared this year with crisp, straight

* 'Handbook of Kitchen Design', University of Illinois, 1950; and 'The Cornell Kitchen', Cornell University, 1952.

edges and sharp corners (in place of the plump curves which have long been characteristic of American kitchen equipment design) so that they can be pushed up together to give the appearance of a built-in kitchen. But here conservatism among dealers again throws emphasis on the value for the future of the builder market. ". . . The built-in principle", writes Miss Van Houten, "is the standard of present forward-looking appliance design because it makes sense both for the replacement and for the new homes' market. But just as dealers fought colour in appliances they are now fighting the 'straight line', but no one seems to know quite why they still want a refrigerator designed to combat wind resistance. Contractors and builders, however, are not against the straight line. They see in it a ready-made answer to installing even more dreamy kitchens to help sell their houses. Installations of all types of straight line units, freezer-refrigerators, dishwasher-disposals, washer-dryers (the combination units are big news), combine with built-in ranges and ovens and provide a custom designed kitchen look for middle class America."

Economics in prefabricated housing

The importance of the builder market emphasises the strengthening link between architect and appliance designer, which in turn points the way to the fully-equipped factory made house. The experimental Monsanto house with its Kelvinator kitchen has already been referred to. The furniture designer, Paul McCobb, at the ASID symposium forecast rapid developments in this field: ". . . In twenty years, prefabricated housing will be the biggest industry in this country. We will have to build houses on the production line in order to realise the economies that mass production brings. When that day comes, we will go through the model T stage, and eventually we will get into the era of push buttons, with automatic windows and so forth. Within a short time 60 per cent of the furniture will be built-in. This can be done right now if the builder wants to go ahead and do it."

Nearly all leading American designers are convinced of the important part which the kitchen will play in these new houses. The present spate of dream kitchens gives a natural emphasis to push button automatism, but the underlying conception provides a realistic foretaste of what the future mass produced kitchen will be like.

It will no longer be the one room, tucked away in the basement or at the back of the house, which visitors must never see. Already it is being considered as the core of family life and as such is being treated as the starting point in the planning of houses for the future. Arthur N. Beckvar, manager, Industrial Design, Appliance and Television Receiver Division of American General Electric, describes for DESIGN the social changes which have led up to this new conception: ". . . more emphasis is placed on home and family living. . . . Larger families and the lack of servants have necessitated as many automatic helpers in the home as possible. By his investment in mechanical

servants, an individual can show his neighbours and associates how he is providing for his family.

"The women's role in our society has become increasingly complex with the triple responsibility of raising a family and running a home, holding a job, and keeping up with outside activities. She is more active in civic, social, and national affairs than ever before. She is caught in a maelstrom and needs all the help which a technological society can give her. Yet with all these forces pulling her in different directions, she still wants to retain the role of a creative home maker - but without unnecessary drudgery.

"It is against this kind of background that the industrial designer contributes by the creation of new conveniences which advance our way of life and raise our standard of living."

The development of larger kitchens in which the housewife can take part in the activities of the house without neglecting the preparation of meals was

discussed by the architect William Keck at the ASID symposium. "I believe the kitchen", he said, "is going to become more and more the important part of the house. We are becoming more interested in good food. Even the man of the house is becoming a good cook. The other night I visited a house-warming cocktail party in a house I designed, and spent the entire party in the kitchen."

The kitchen as a function

Some designers believe that analytical studies of the functions traditionally performed in the kitchen will lead eventually to the disappearance of the kitchen itself as a separate entity within the house: ". . . will there be a kitchen room in the traditional sense," asks Dave Chapman, "or even a kitchen area in the more contemporary manner? The high cost of building has led many home buyers to plan their purchases on the number of square feet they can afford at so much

4

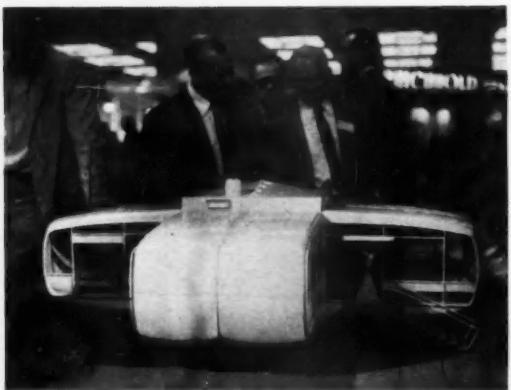
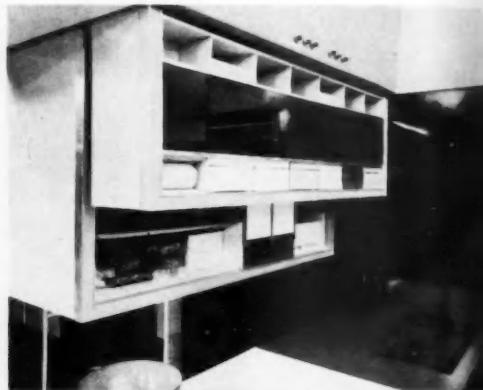


Photo Jane Miterachi 'Industrial Design'

5



6



7



KELVINATOR

The 'Atoms for Living' kitchen was designed by the Kelvinator Division of American Motors Corporation at the request of the Monsanto Chemical Co to meet the needs of its experimental plastics house of the future, 4. Like the Whirlpool design this kitchen, 8, has been conceived as part of the general living area which it matches in appearance. "It is possible", writes the firm, "that the word 'kitchen' could disappear from our vocabulary in favour of some new term that would describe this family food centre". The principle of lowering storage units to an accessible height from behind wall cabinets is similar to the Whirlpool idea. The freezer compartment, 5, is in two sections which can be lowered independently so that all foods may be obtained easily without deep reaching. An ultrasonic dishwasher is housed in an island unit, 6, which when closed serves as a desk and communications centre, 7. Below the storage wall area is a series of shallow compartments for kitchen utensils.

The kitchen is modest in scale and practical in conception being within the possibilities of production in 5-15 years time. Its use of moulded plastics reflects closely the forms of the Monsanto house and creates a foretaste of future domestic interiors.

at the ASID
aid, "is going
part of the
on good food.
a good cook.
ming cocktail
e entire party

studies of the
kitchen will
the kitchen
: " . . . will
l sense," asks
in the morn
of building
purchases on
d at so much

per square foot. Within that living area, they hope to include all the facilities for the functions of their daily routine. The new kitchen is no longer a room - it is a function."

Mr Chapman goes on to describe some of the developments that he anticipates during the next few years to replace existing designs which lack the flexibility he feels will be required: "neither built-in-cooker units nor wall-mounted units answer the demand for flexibility in use - they are little more than symptoms of a basic direction. New automatic appliances - fryers, browners, roasters, rotisseries - have had notable success on the market. Next we must design these units in matched 'family' lines to answer every need. Then we must meet the new living pattern.

"Add, for example, a plug-in rolling cart to take them near the dining area. The homemaker then can do her advance preparation in the kitchen area before guests arrive, roll the cart next to the dining table and

greet the guests on arrival while the food cooks in full view. By the time she is ready to serve, the food is cooked, switches have flipped to 'warm', and the food is at the table side for immediate service from a handsomely appointed new appliance - the gourmet cart."

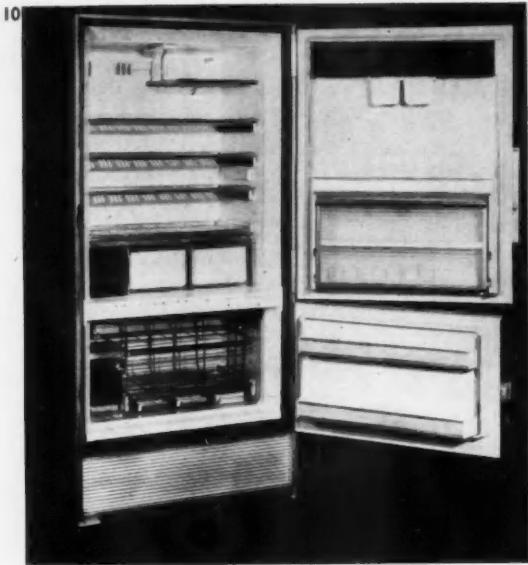
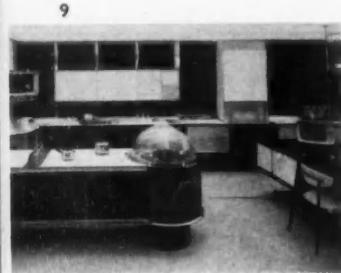
Wander-plugging throughout the home

The wide range of individual powered appliances now available on the American market (each designed to serve a distinct and separate function) suggests that the disintegration of the conventional fully-equipped kitchen into its component parts has already begun. 'Wander-plugging', the new phrase to describe this process, has been foreseen by several American firms which are producing different forms of 'plug-in centre'. Although this small, specialised equipment is being used today mostly to supplement the services of the conventional kitchen, the fitting of plug-in centres at

continued on page 50



FRIGIDAIRE



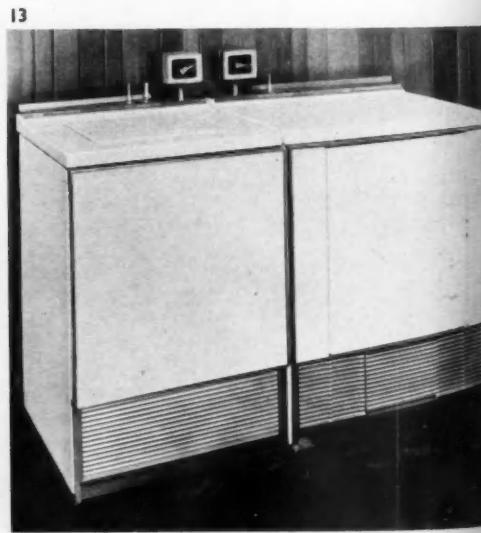
The straight line character of the new range of refrigerators, freezers, cookers and washers by the Frigidaire Division of General Motors Corporation is claimed to have been derived from ideas first developed in connection with the 1954, 1955 and 1956 'Kitchens of Tomorrow'. Harley J. Earle, vice president in charge of styling at General Motors, has described these experimental kitchens as laboratories "for the practical testing of advanced concepts in kitchen design and convenience. Here stylists and enquirers are able to try out bold new ideas, unhampered by the limitations of market demand and production practicalities". The 1956 kitchen, 9, (first shown in DESIGN July 1956 page 42) echoes the pattern of development in other companies. The week's meals can be selected and prepared automatically at the planning centre from specially packed fresh and frozen foods, ultrasonic washers cope with the dishes, audio and visual communications allow the housewife to carry on a phone conversation without moving from her task, or will allow her to order an evening meal while away from home, a circular revolving refrigerator can be loaded outside by the delivery man, and so on.

The severe, sophisticated appearance of this kitchen is

certainly reflected in this year's range of individual appliances by Frigidaire which can be lined up together to give the appearance of a built-in kitchen. The refrigerator-freezer combination, 10, shows the drastic change from earlier versions with their heavily modelled doors and elaborate handles. Here the door is set within a bright metal frame and the handle has become a barely noticeable feature at the edge. The depth has been reduced to give greater accessibility and a new type of hinge developed to allow the front to line up with other kitchen cabinets. The introduction of a charcoal grey finish (among other colours) reflects a current trend away from aseptic whiteness.

Other appliances have been brought into line to form a matching range. The cooker, 11, follows a conventional arrangement but introduces a new refinement in the treatment of the control panel in place of the coarse chrome decoration of earlier models. The tower controls in the washer and dryer, 13, are elegant and fashionable substitutes for the normal back panel.

One development which may become common in future appliances is the fold-away cooking top which can be seen in the experimental unit, 12.





15

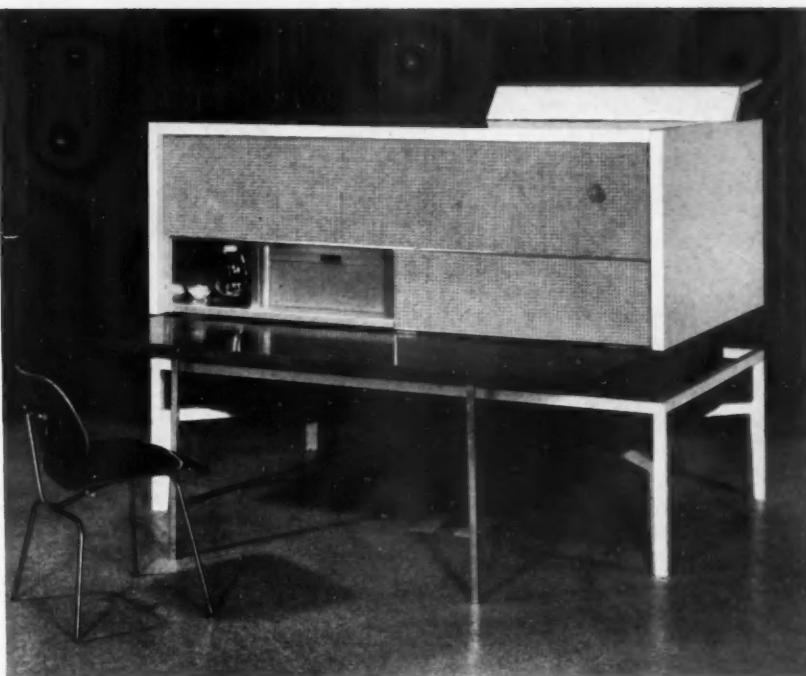
GENERAL ELECTRIC

The straight line look for individual appliances is not confined to Frigidaire. General Electric has produced a range of similar matching equipment this year to meet the needs of those who would like to have, but cannot afford, a built-in kitchen. The washer and dryer, 14, shows the character of the range which benefits from the simple and unemphatic corner treatments, but retains a characteristic coarseness in the design of the control panel. The most significant development remains the packaged kitchen first produced last year and shown here, 15, in a suggested arrangement as a free standing screen forming one arm of a U shaped kitchen with the general living area beyond.

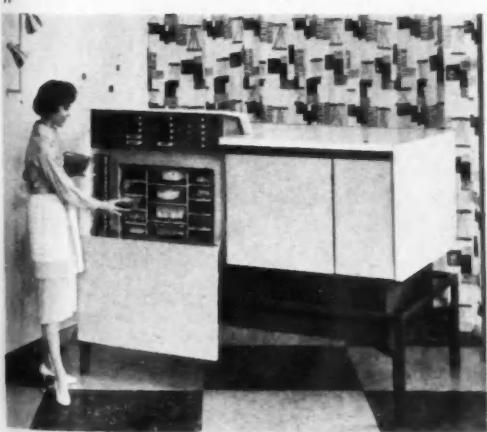
The latest development is the XPC-1, 16, a programming cooker which, though still in experimental form, has brought this dream kitchen type of equipment a stage nearer to actual production. The machine consists of a freezer on one side and an electronic oven on the other connected by a conveyor belt system. The freezer will hold up to 42 dishes of 14 different kinds of prepared food in covered dishes (a family's dinners for a week), 17, which are fed in on the kitchen side. Meals are selected by push buttons and the dishes are automatically transferred to the oven where they are fully cooked in about 35 minutes and delivered to the dining side, 18.



16



17



17



18

THERMADOR

Although the Norris-Thermador Corporation pioneered some of the more important developments in modern kitchen planning, such as island cooking tops and heart-high ovens, it has conscientiously avoided the more fashionable elements in equipment design. In the words of F. M. Pence, vice president in charge of engineering: "No amount of flash and glitter will ever overcome the lack of quality, reliability or correct performance. First of all we believe there must be a need . . . the need must be there or there is absolutely no excuse for the product. Thermador has never actually thought about designing for obsolescence. A better product, one which answers a need, requires far less promotion than merely a change of contour".

The ovens and refrigerators, 19, with their simple stainless steel finish, and lack of ornamentation are characteristic examples of the built-in appliances in which the firm has specialized.



various points over the whole home area is a logical development. The electric trolley unit by L. G. Hawkins & Co Ltd is an early British development which anticipates this trend, while the Smithsons' made use of a similar device in their 'House of the Future' at the 1956 'Daily Mail Ideal Home Exhibition'.

Clearly the appearance of the kitchen living areas with their mobile equipment will change considerably from the modern convention of white enamel and chromium trim, and the American dream kitchens suggest in various ways that the kitchen will lose its identity and will merge imperceptibly with the living area. Existing custom built kitchens that make use of natural wood finishes are frequently carried out in Colonial styles suggesting that there are many Americans who are conscious of the need for a living room atmosphere in the kitchen, but eschew the sophisticated smartness of the dream kitchen because it seems to reflect a greater pre-occupation with the romance of science than with the comforts of home.

Implications for British firms

These extensive developments in the appliance field which result largely from America's prosperity and high living standards, in turn depend upon the benefits of a large home market. Designs which would be too costly to tool up in Great Britain can be fairly certain of market success in America. Capital is available for

research and experiment on a scale that would be out of the question for most British firms. While there is little immediate chance therefore, of translating all these American advances into terms that would be acceptable in Britain, the prospect of a Common Market in Europe should provide those elements which have contributed to America's prosperity.

Out of the galaxy of push button wonders that superficially appears to dominate the American appliance field, it is perhaps the conception of long range product planning which most deserves study in this country. This does not mean a five-year plan of annual face lifts on a standard product, but an appraisal of social and technical developments over a wide field during the next 10 or 20 years and the evolution of a programme that will meet or accelerate those conditions. Advanced planning of this type will mean a greater collaboration between appliance manufacturers, architects and builders than is apparent at present; a collaboration that will become supremely important as techniques of prefabrication for housing are more fully exploited. The development of the builder market for complete packaged kitchens included in the house mortgage, is an obvious first step that would help both the manufacturer and the householder out of their purchase tax and hire purchase problems, which today are holding back a more rapid growth of the British domestic appliance industry.

J.E.B.



Electric food warmer by L. G. Hawkins & Co Ltd.



Portable cooking unit by Alison and Peter Smithson, for the 'House of the Future' at the 1956 'Daily Mail Ideal Home Exhibition'.



22



21

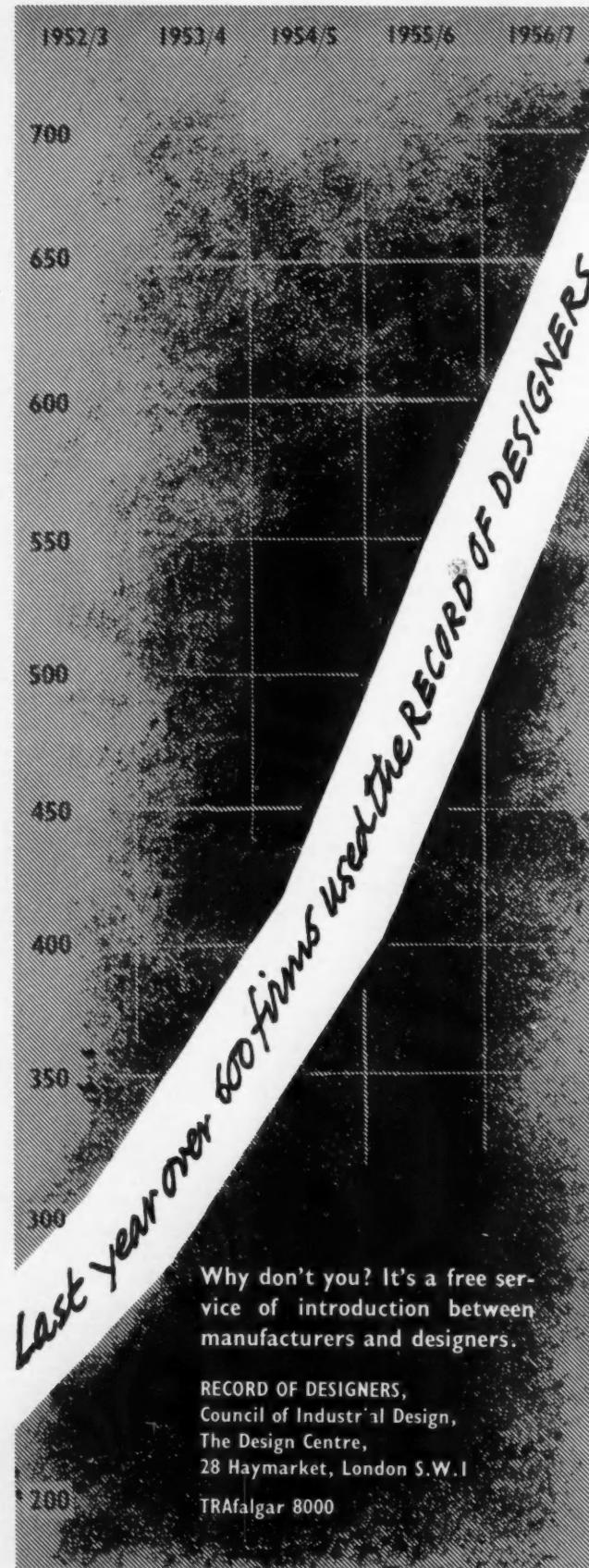
The kitchen disintegrating?

An indication of the growing range of thermostatically controlled individual cooking appliances available on the American market can be seen in 22. Although these appliances are generally still used in the kitchen to supplement conventional kitchen equipment, extension of their use at any point in the house where they may be required, is a logical development which some designers consider will lead to the disappearance of the kitchen as a separate entity. 'Plug-in centres' such as the Westinghouse, 20, and the 'plug-in strip' by National Electric Products, 21, show current methods of dealing with multiple outlets for this specialised type of equipment. Present developments represent the unplanned beginnings of a new domestic way of life and have yet to be conceived as an integrated part of the house.



... by Alison and Alison Co Ltd.

unit by Alison and Alison for the 'House of the Future' 1956 'Daily Exhibition'.



ideas

*mostly come unexpectedly, you
cannot however enforce them good*

examples

*relax your cramped mind and give
inspiration to creative work.*

The ideas and examples in the

GRAPHIK

*the international monthly journal
for Advertisement and Industrial Design
is worth while buying*

Satisfy yourself by a free

specimen copy

from Alec Tiranti Ltd

72 Charlotte Street, London W.1

(subs: 12 issues £4.80 · Single issues 80p)

Miscellany



Electric shaver socket redesigned

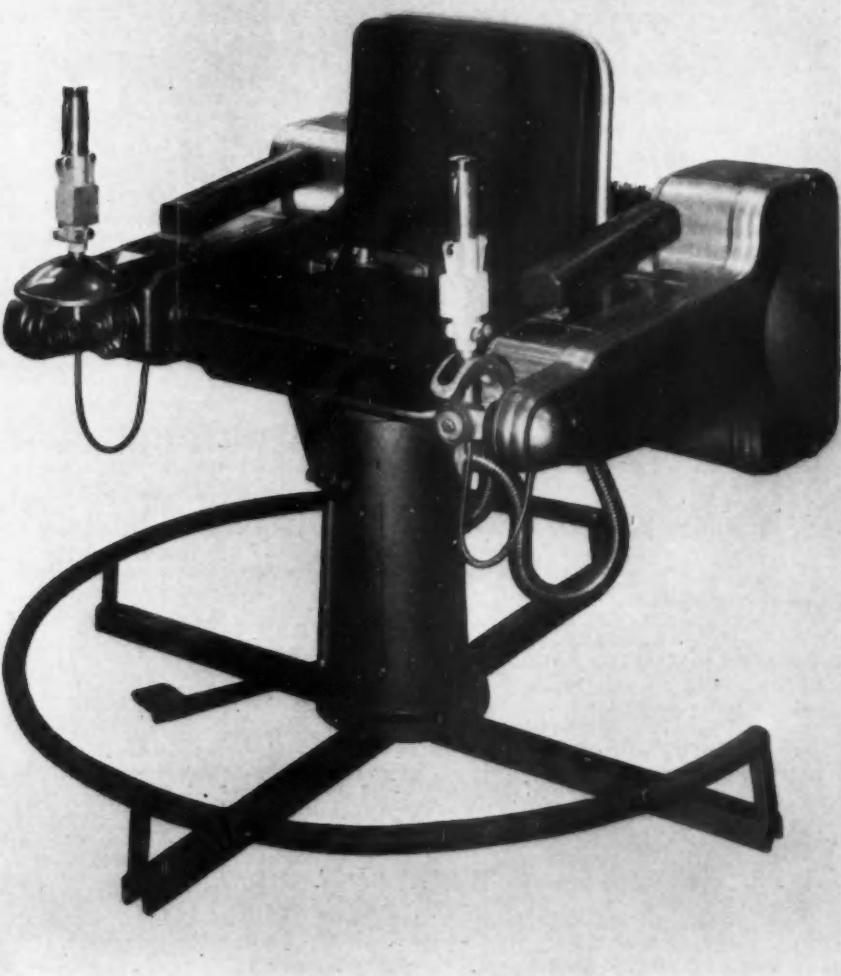
The use of electric razors is becoming more widespread, and provisions are now made for them in a large number of new buildings, particularly hotels. In hotels which cater for foreign visitors, sockets are needed which are suitable for various voltages and which cannot be overloaded by being also used for travelling irons, radio sets, etc. The technical difficulties of compressing a transformer tapped for various voltages, a switch, several sockets, and overload devices into a small box were successfully overcome by Chilton Electric Products Ltd some years ago (above), but little attention was paid at that time to the appearance of the plastics front panel. Following criticisms from overseas buyers, particularly in the Far East where large numbers of these sockets were exported, the firm called in a consultant, A. B. Kirkbride, to redesign the tool for the plastics moulding. The result is shown in the illustration below. The filled lettering is blue and brings out all the relevant material clearly, but it may not have been entirely wise to eliminate the 'on' and 'off' markings, since in some countries the 'on' position is reversed.

PETER E. M. SHARP

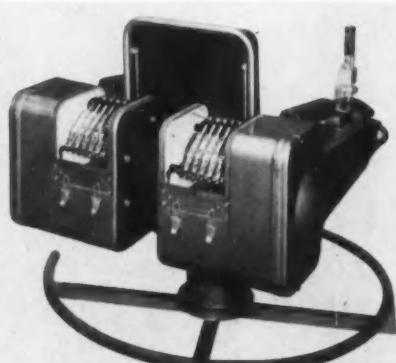


A crane control unit

This new design for a crane control unit, which is of Italian origin, is further evidence that the ergonomic approach to the design of operator controlled equipment is often the most successful and appropriate one. In this case the need for good visibility over a wide area below an overhead crane has led the designers to use relatively small control levers and to place the associated control gear behind the seat, out of the field of vision. The unit is placed in a cab with glass sides and floor through which the operator can look over a wide angle by rotating the seat through 120 degrees. The seat is turned by moving the feet along the curved foot rail. It will be interesting to see whether operators using this unit will in fact rotate it instead of turning their heads when they wish to look to one side. This possibility, the continuous muscular effort needed to operate the safety catches on the control handles, and the inadequacy of the single rail as a foot rest, suggest that the design of the unit is only partially based on



ergonomic principles and may not be derived from a complete analysis of all the factors affecting the operator's state of mind and body. The unit is sold in this country by G. W. B. Furnaces Ltd.



BOARDROOM FURNITURE TO MEASURE

is a practical possibility and need not cost the earth. For Executives who have special problems; the desk top must be large enough for plans or drawings, suitable for people to sit round in conference, or accommodate a special reference or filing system. All these and many other problems have been solved by HAMMERS.*

* The Brothers Nicholson have designed attractive, reasonably priced Office Furniture exclusively for HAMMERS.



Office desk was part of the furniture designed by Holland & Hannen & Cubitts Ltd. for The Cement Marketing Board Offices.

Geo. M. Hammer & Co. Ltd.

'You can trust Hammer's personal service'

Specialists in Library, Office and Laboratory Furniture.

Crown Works, Hermitage Road, Harringay, London N.4 STAmford Hill 6691-2

Craftsmen in woodwork since 1858

NEW DESIGNS · NEW COLOURINGS · *From our* · 'ELTON' COLLECTION

JOHN LINE & SONS LTD
MAKERS OF FINE WALLPAPERS AND PAINTS
213-216 TOTTENHAM COURT ROAD · LONDON W.1

WE INVITE YOU
TO VISIT
OUR SHOWROOMS

NEWS

CoID

New member

The CoID welcomes a new member, Elkan Simons, recently appointed by the President of the Board of Trade. Mr Simons is managing director of Simons Bros (London) Ltd and chairman of the Design and Research Centre for the Gold, Silver and Jewellery Industries, in which he is well known.

Carpet designers' conference

A conference for carpet designers, organised by the CoID in co-operation with the Federation of British Carpet Manufacturers, was held at the CoID recently. Over 30 delegates representing some 16 firms attended, and talks were given by Sir Gordon Russell, A. Everett Jones, Misha Black, Astrid Sampe, together with representatives from the carpet and allied trades. Sir Colin Anderson and E. O. Carpenter, chairman of The Carpet Manufacturing Co Ltd, spoke at a dinner organised for the delegates.

Furnishing hotels

A special committee of the British Hotels and Restaurants Association paid several visits to The Design Centre recently. It was examining furniture and furnishings with a view to suggesting designs likely to be suitable for use in hotels from 'Design Review', the CoID's photographic and sample record of well designed consumer goods. Photographs of the designs chosen in this way are now specially marked in 'Design Review'.

REPORTS & CONFERENCES

A day in Paris

Une Journée Internationale d'Esthétique Industrielle, or in other words a day-long symposium of papers by speakers from several countries, was staged at the Foire de Paris recently under the guidance of the French Institut d'Esthétique Industrielle. The subject for debate was the role of fashion in industrial design.

Display in a small showroom

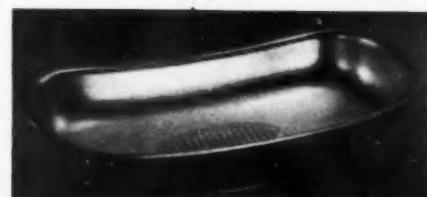
British Olivetti Ltd's showroom in Kingsway, one of the company's smallest, has recently been redesigned by Egidio Bonfante, from Olivetti's art department in Italy. The mural panel on the balcony was constructed in Italy and is made up of photographs of sign languages and alphabets mounted into black metal rod. The chairs and information desk were designed in Italy, while the small tables are the company's own design.



which offered many false scents into the realm of *haute couture*. The audience, composed partly of French manufacturers, but mainly of young architects and students, showed some impatience with these digressions, preferring instead those arguments which related to the more solid sectors of industry. Louis Kalff, design director of Philips, Eindhoven, opened the discussion with a carefully contrived analysis of the incidence of fashion and function in various categories of industry. He was followed by R. L. Delevoy representing the *Centre National Belge d'Esthétique Industrielle*; Paul Reilly of the CoID; Professor Otto Haupt of the Karlsruhe Technical College; Gillo Dorfles the Italian art critic; and Jacques Viénot, director general of the *Institut d'Esthétique Industrielle*. The conference was opened by Tony Bouilhet, president of the *Foire de Paris* and was chaired by Raymond Boisné, a former French minister of commerce, and founder of the 'Label Beauté-France' - a distinction awarded by a jury to French products of outstanding design.

At the end of the conference the delegates visited a pavilion in the *Foire de Paris* specially designed for a selective display of modern Italian products, one of the most popular and certainly most impressive exhibits in the fair.

Silver fruit bowls presented



The Worshipful Company of Goldsmiths has presented five of these silver fruit bowls to University College, London, as "a token of the friendly associations between the two institutions". They were designed and made by David Mellor, and engraved by T. F. C. Wise.

Research into comfort

The Dunlopillo Division of the Dunlop Rubber Company has asked the Furniture Development Council to carry out research into the comfort of upholstered furniture, and will subscribe £1,000 a year for three years towards the work. The FDC believes that although a good deal of research has been carried out into seating for work, very little has been done into seating for leisure. It hopes to make the search for an index of comfort the central core of its work, and at the same time to study the effect of design factors on comfort, and to publish data for designers. The FDC has not yet decided exactly how the research will proceed, but will start by making a thorough survey of available anthropometric, physiological and psychological information. Where there are gaps in the information it will develop techniques to fill them, and at the moment is developing an ingenious machine for measuring the pressures exerted by a sitter on different parts of a chair. M. J. Merrick, head of the FDC's research department, will be in charge.

This is an ambitious programme, and its importance to designers cannot be over-estimated. The FDC may not at the end of three years produce a perfect method



Service station for Harlow

This new service station, built by Kennington Ltd in association with Shell-Mex and BP Ltd, was opened at Harlow New Town recently. In 1951 Shell-Mex and BP set up an architectural section under the leadership of Denis Birchett, to undertake research into the design of service stations, and to work on a system of modular construction for them. An earlier station at Reading, built by the architectural section of Shell-Mex and BP Ltd, was discussed and illustrated in DESIGN October 1955 page 55.

of measuring that elusive quality comfort, but the fact that money and time are to be applied to the problem by a body with considerable and successful experience in applied research cannot fail to bring about a great improvement. Designers at present can hardly be blamed if their chairs and sofas are too large, too small, too soft or too hard (even sometimes all four at once). They can neither easily obtain, nor easily co-ordinate the information available already, and they certainly cannot fill in the gaps.

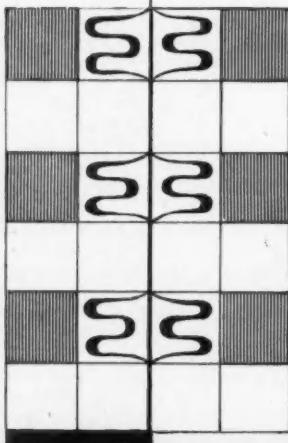
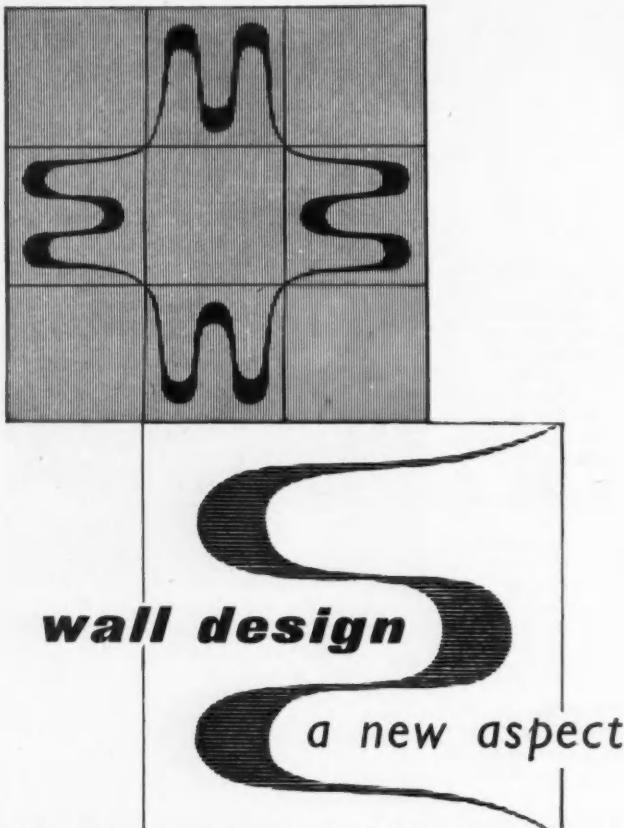
The Dunlop Rubber Company is to be heartily congratulated on its public-spirited proposals. No conditions are attached to its subscription; the research will be independent and will apply to all upholstered furniture, rubber, sprung, or any other type, excluding beds. It is hoped that if more resources are needed, other organisations will step in. The cost of this kind of research is not excessive, but it cannot be done on a shoestring. A sample survey, or thorough trial, will employ several people sometimes over a year or two. The return in pleasure and comfort to the consumer is likely to be out of all proportion to the costs. In addition, the far-sighted furniture manufacturer who keeps in touch with the FDC for the next two or three years, may be able to command a gratifying increase in sales.

BRIGID O'DONOVAN

Equipment designed for human use

'The Design of Equipment for Human Use' was the subject of a meeting held at Cambridge recently in the Applied Psychology Research Unit of the Medical Research Council. There were sessions on the military and industrial aspects of work design, on the use and abuse of simulators, on equipment design for training and maintenance, and on automatic data analysis in human research. There were also 20 practical demonstrations of various aspects of this work, by members of the Applied Psychology Research Unit and also by visiting speakers. The meeting was attended by 80

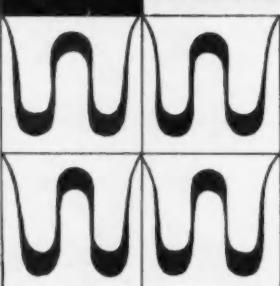
continued on page 57



a first class medium for creating individual wall patterns is provided by Pilkingtons. These printed tiles can be arranged in any number of ways to form large or small patterns. They are made in a choice of colours which can be effectively combined and offer wonderful scope for wall design.



PILKINGTON'S TILES



Architects are invited to write for full details to Pilkington's Tiles Ltd
Clifton Junction near
Manchester
Tel. SWinton 2024-5-6
London office:
27b Old Gloucester St, WC1
Tel: HOLborn 2961-2

GOING ABROAD?

**Make it the rest
you owe
yourself**

Take your journey by sea, even if it is only that part after your business is done. You'll say you can't afford the time. But if you're important to your organisation, you are bound to need a good rest.

You may have to go to Sydney or Auckland, to San Francisco or Vancouver. You even may have time for a short break in Honolulu—and to all these places you can travel in the large, very comfortable ships of the Orient Line.

Back home again, refreshed and fit, you will be thankful you travelled in an Orient liner.



ORIENT LINE

ENGLAND AUSTRALIA NEW ZEALAND CANADA U.S.A.

Chief Passenger Office
28-27 Cockspur Street, London, S.W.1 TRA 7141
City Passenger Office
9-11 Billiter Square, London, E.C.3 ROYal 5678
or your local Travel Agent

NEWS

representatives, from the three services and the Ministry of Supply, as well as from industry, university departments, and Government organizations.

COMPETITIONS

Designs for wallpaper

The Danish wallpaper manufacturer, Fiona Inc, Faaborg, Denmark, has announced details of an international competition for the design of wallpapers. The competition is being held in collaboration with the Federation of Danish Architects and the Danish Society of Arts and Crafts and Industrial Design. Designs should be sent to the firm, and the last date for receipt of entries is August 27.

Wool textile competition results

Results have been announced of the National Wool Textile Design competition, organised by the journal 'Wool Review', 222 Strand, WC1. The judges were especially impressed by the work submitted by young competitors. The first prize for women's wear fabrics was awarded to Pamela Musgrave, a student from Lytham, Lancashire; J. W. Senior, of Benjamin Armitage & Sons Ltd, Shepley, was awarded the first prize for men's wear fabrics; the Frank Broadhead travel bursary was awarded to Diane Wilkinson, Stroud School of Art, and K. Bentley of Broadhead & Graves Ltd, Huddersfield, gained the 'Wool Review' travel prize.

EXHIBITIONS

Central school work on view

Two open days at the LCC Central School of Arts and Crafts afforded a brief opportunity for seeing the students' work. The exhibits in the Industrial Design (light engineering products) department seemed adventurous; not all the ideas were good or practical, but there was a lively sense of invention, especially in the experimental work of some of the first year students. In the furniture department technical ability was high and there were two or three original pieces, but in general the designs were derivative and too conscious of current fashions. The work of the pottery students was good, worthy, functional - but pedestrian. While it was an improvement on recent years, it lacked any real touch of inventive genius. Comparing the work of the various departments, it seemed as though students were too absorbed by their own work to see what was happening in other departments; again some were too acutely conscious of current fashion clichés to be original. Although there are a number of overseas students at the school their influence is not generally apparent. Perhaps they are so eager to acquire Western standards that they neglect their own contribution.

SYDNEY FOOTT

Exhibitions in the provinces

Exhibitions arranged by the circulation department at the Victoria & Albert Museum include 'Two centuries of English chintz', to be held at the Williamson Art Gallery, Birkenhead, August 5-October 7; 'Wallpapers (16th to 20th centuries)' at the Bristol Art Gallery in August; and 'Contemporary German Furnishing Fabrics', Derby Art Gallery, August - September.

The Worshipful Company of Goldsmiths is holding an exhibition of modern silver at Leicester City Art Gallery until August 11 and at Derby Art Gallery from August 15 - September 23. Examples, of both ceremonial and domestic silver, will be shown, representing the company's own collection and other important pieces.

Subtopia at the RIBA

The RIBA recently held a 'Subtopia' exhibition at its headquarters in Portland Place. This has been designed for touring around the country; it deals with the apparently inevitable spoilage of the English rural and urban scenes and is intended to be an eye opener for the man in the street. A special pamphlet explaining the aims of the exhibition has been written by Ian Nairn.

Thomas Telford bicentenary

An exhibition to mark the bicentenary of the birth of Thomas Telford, the civil engineer, will be held at the Institution of Civil Engineers, Great George Street, Westminster, until August 10. The exhibition is under the direction of Richard Buckle and Leonard Rosoman has painted a landscape showing many of Telford's works.

MISCELLANEOUS

Bicentenary medal

Sir Ernest Goodale, vice-president of the Royal Society of Arts and a former member of the CoID, has been awarded the Bicentenary Medal of the Royal Society of Arts. The medal, which was instituted in 1954, is awarded annually "to the person who in a manner other than as an industrial designer has exerted an exceptional influence in promoting art and design in British industry".

Sir Ernest Goodale was one of the original members of the CoID when it was established in 1944, and he

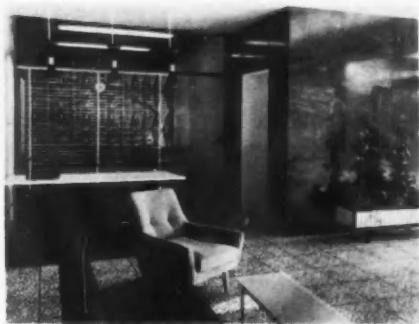


Sir Ernest Goodale

resigned in 1949 on accepting the chairmanship of the Royal Society of Arts. He was subsequently appointed vice-president of the RSA, and is chairman of its Industrial Arts Bursaries board. He is also chairman and managing director of Warner and Sons Limited, the textile manufacturer, president of the Textile Institute and of the British Colour Council, and vice-president of the Federation of British Industries.

New RDI

Misha Black, the architect and industrial designer, has been appointed to the distinction of Royal Designer for Industry by the council of the Royal Society of



New offices in Birmingham

A new office and warehouse building designed by Leonard J. Multon has been erected in Birmingham for H. & D. Churchill Ltd, the hardware factor. The illustration shows the entrance hall of the new premises. The desk, designed by the architect and manufactured by Lotus Ltd, has a yellow plastics top with a polished mahogany base, the walls are in black marble. The floor tiles are made in Italy and the chair is by Buoyant Upholstery Ltd, settee by Cambridge Ltd, and the marble top table by Terence Conran.

Arts, in recognition of his work for exhibition and interior design. Mr Black has been a member of the CoID since 1952, and is a senior partner in Design Research Unit, 37 Park Street, W1. The faculty of Designers for Industry was established by the Royal Society of Arts in 1936; the number of living recipients is strictly limited by the council of the RSA, and the distinction is conferred upon "persons who have attained high eminence and efficiency in creative design for industry."

A packaging centre

A new organisation known as The Packaging Centre Ltd, proposes to open a packaging centre in London. As well as probably housing the headquarters of the Institute of Packaging, it will maintain a permanent exhibition of packaging materials, methods and equipment. The centre will be under the direction of Philip A. Andrew, one of the originators of the Institute of Packaging; the temporary headquarters of The Packaging Centre Ltd, are now at 20/21 Took's Court, Cursitor Street, EC4.

A British computer society

The British Computer Society is a new organisation which has been formed to further the development of computational machinery and to stimulate public interest in this and allied techniques. The London Computer Group formed last year to cater mainly for business interests has lent its support to this new society. In addition to publishing a journal, the society intends to hold conferences and lectures, etc. Its headquarters are at 29 Bury St, SW1.

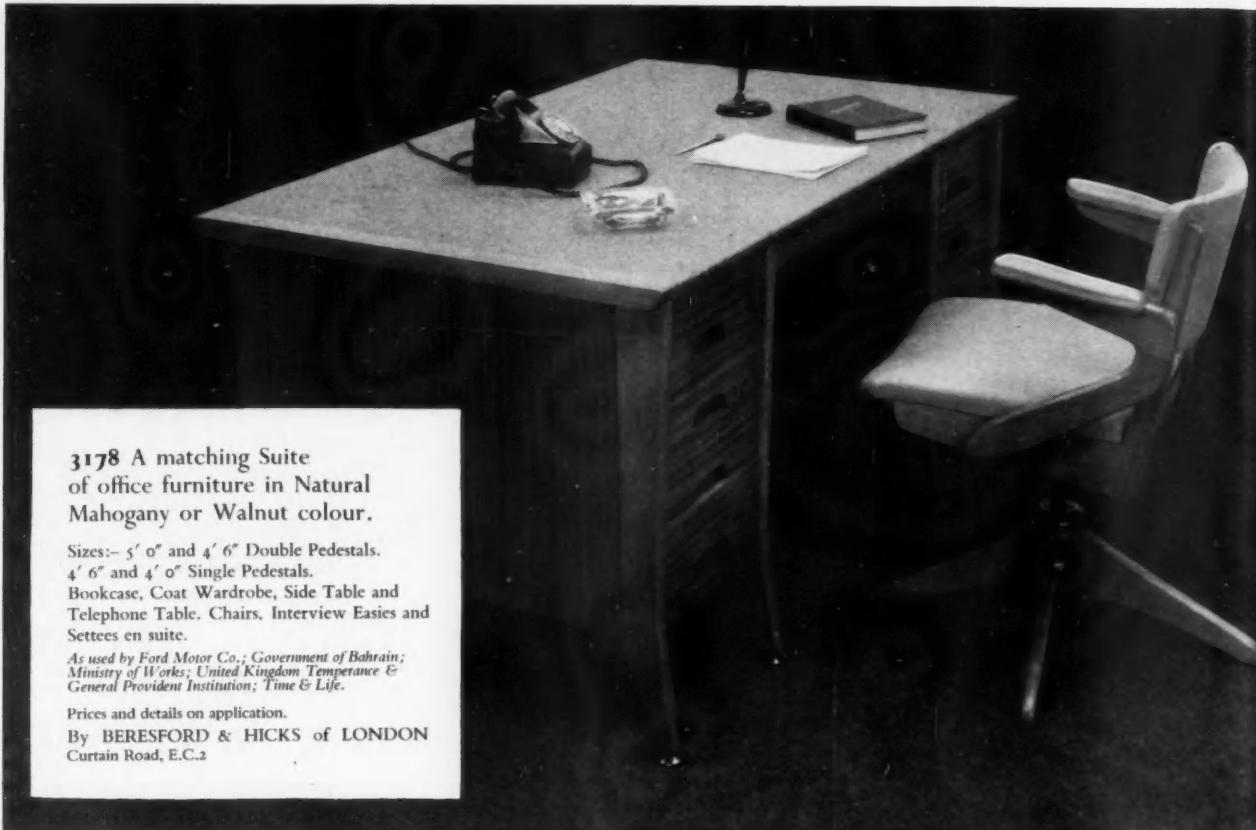
A new multi-purpose glass material

Corning Glass Works, Houghton Park, Corning, N.Y., announced recently the development of a family of new crystalline materials made from glass. These are tough

continued on page 59

INE
NADA U.S.A.
W.1 TRA 7141
3 ROYAL 5678

104



3178 A matching Suite
of office furniture in Natural
Mahogany or Walnut colour.

Sizes:- 5' 0" and 4' 6" Double Pedestals.
4' 6" and 4' 0" Single Pedestals.
Bookcase, Coat Wardrobe, Side Table and
Telephone Table, Chairs, Interview Easies and
Settees en suite.

*As used by Ford Motor Co.; Government of Bahrain;
Ministry of Works; United Kingdom Temperance &
General Provident Institution; Time & Life.*

Prices and details on application.
By BERESFORD & HICKS of LONDON
Curtain Road, E.C.2

THE MARK III COLLARO TAPE TRANSCRIPTOR

... Designed on Transcription quality principles for live recording, recording from F.M. Broadcasts, etc., and reproducing pre-recorded tapes. A twin-track model fitted with four heads, the new Collaro Tape Transcriber runs at 3½, 7½ and 15 inches per second.

Several new modifications are incorporated in the Mark III, including the Pause Control and removable switches. Pre-amplifier, incorporating bias oscillator and power pack for the Tape Transcriber, is now available.



COLLARO LTD., RIPPLE WORKS, BY-PASS RD, BARKING, Essex

Telephone: Rippleway 5533 - Telex 8748 Telegrams: "Korlaro" - Telex - Barking

Makers of Record Changers, Gramophone Units, Pickups, Electric Motors,
etc.

and heat resistant, harder than steel and lighter than aluminium.

The new material is called 'Pyroceram', and was invented by a Corning chemist, Dr Ronald Stookey. The firm claims that its possible uses range from supersonic aircraft parts and jet engine components to kitchen appliances and architecture. Its first practical application is in 'radomes', the nose cones of guided missiles.

'Pyroceram', which has glass as a base plus special ingredients, can be made in almost any shape by conventional blowing, pressing, drawing or spinning techniques and casting, and in its finished form can be transparent, opaque or milky white.

The new factory at Corning



The new Corning Glass Works building at Houghton Park, Corning, NY, designed by Harrison and Abramowitz. In the foreground is a white glass cafeteria by Marion Bergson Associates.

Swedish society of industrial designers

A new association of industrial designers has recently been formed in Sweden. The society will be known as Swedish Industrial Designers (SID), and its purpose is to support industrial design and to further the interests of designers. The society will work closely with Svenska Slöjdforeningen, the Swedish Society of Industrial Design, and the Swedish monthly magazine 'Form' will act as its mouthpiece.

LETTERS

The Good Housekeeping Institute's job

SIR: It is apparent that Charles Dawson, who, in a recent letter (DESIGN May page 59), referred to the work of the Good Housekeeping Institute as "amateur and pedestrian", is not aware of our special role in consumer protection.

In line with most organisations, the testing service provided by the Good Housekeeping Institute necessarily has its limits. The basic research and creative designing that precede the marketing of equipment are not our first concern as your correspondent appears to assume. The institute does not exist to pioneer and

promote new concepts and developments in the domestic designing field.

Our primary function – and these limitations we have quite deliberately imposed on ourselves – is to examine and advise on articles already in existence. We place the emphasis on functional and practical efficiency and substantiation of any claims made. Our testing is carried out by fully trained technical staff and specialist consultants, supported by the opinions of a panel of typical housewives. Our experience of over 30 years leads us to believe very firmly that tests under home usage conditions should go hand in hand with scientific and technical laboratory tests.

Although we are not designers, it is inevitable that manufacturers will consult us from time to time at certain stages in the development by them of new articles, and we believe there are many manufacturers who would acknowledge the value of the advice that we have been able to give them. But we do not go out to manufacturers with ideas, nor do we suggest that their products be submitted to us for test. It is the manufacturer who must take the initiative if he is anxious to seek the award of our 'Seal of Guarantee'.

Let me emphasise that we take our responsibilities to the consumer very seriously. The Good Housekeeping Institute's 'Seal of Guarantee', which is only awarded to articles which successfully pass through our stringent tests, is appreciated as a valuable safeguard by a large body of the public. It is a firm legal guarantee of refund of money or replacement if the article is not in conformity with our standards.

Although we do not in any way overlook the desirability of attractive looking equipment, the more aesthetic side of design is, we feel, covered by the CoID which is doing excellent work in this field. At the same time, it is perhaps worth mentioning that our experience does indicate that it is not always the appliance produced as a result of basic research of one kind or another, that necessarily stands up to the practical domestic and scientific tests carried out by the Good Housekeeping Institute.

In conclusion, I should like to make it clear that in our opinion basic research is one thing, while testing of performance standards is another. It would appear that your correspondent is in fact confusing the work of the Good Housekeeping Institute with that of bodies whose main object is to influence manufacturers with a view to the production of well designed articles.

P. L. GARBUTT
Director and Principal
Good Housekeeping Institute
28-30 Grosvenor Gardens, SW1

Original thought versus basic form

SIR: I would like to join with Stuart Rose (DESIGN June page 65) in praise of the high standard of presentation which DESIGN has achieved.

Indeed, I doubt if anyone would rate it second to any design publication available throughout the world.

However, I do have one small point of criticism, not with the look of the magazine but in connection with the choice of some of the contents.

For example, the June issue (page 23) illustrates a lampshade as one of the 12 'Designs of the Year'. Whilst agreeing that the shape is pleasing and practical, I feel it is only one of many absolutely basic geometrical forms which have been used for lampshades over and



Design Centre visit by Consul General

Sir Hugh Stevenson, the British Consul General in New York, recently paid a visit to The Design Centre. He is seen here (left) with Paul Reilly, deputy director CoID, discussing one of the leather goods on display.

over again, and which, no doubt, will continue to appear as new from time to time.

How much longer will selection panels continue to choose, and magazines continue to illustrate these elementary subjects, and moreover associate them with products which are undoubtedly the result of much original thought?

L. E. A. PHILLIPS
Chief Designer, Lighting Fittings
General Electric Co Ltd
Magnet House
Kingsway, WC2

British goods in Germany

SIR: I have recently returned from a fortnight's lecture tour in Germany, during which I had time to study shops in Essen, Bochum, Bielefeld, Dortmund, Cologne, Karlsruhe, Mannheim and Stuttgart. In all these places I was appalled by the virtually complete absence of British goods in the shops. The new shopping centres of these towns were stacked with goods, mostly German, and the prices were a good deal higher than our own. Surely there must be an opportunity for us in these thriving shopping centres, and surely some effort should have been made long since, to break into this market?

I found a universal ignorance of the fact that Great Britain produced any goods of modern design. The *Landesgewerbeamt* (small Board of Trade) in Stuttgart has a magnificent museum with collections of small goods from many countries covering some hundreds of years and continuing to the present day. Modern table and kitchen ware, chiefly from Scandinavia, Germany, USA, Italy and Holland are shown there, and Great Britain was represented by one piece. It was explained that the officials were very willing to buy British goods but did not know how to see any to choose from. Britain was also virtually unrepresented in the Villa Hügel collection at Essen (DESIGN March page 49). My slides of modern British design clearly came as a great surprise to my German audiences.

Scandinavia in German eyes is the chief source of palatable modern design; its craft-based quality and

continued on page 61



'Whipsnade Zoo', a poster designed for London Transport by H. Unger. It is one of the series of full colour prints of famous London Transport posters, which includes the work of Edward Bawden, A.R.A., John Minton, E. McKnight Kauffer and many others. The average size of the prints is 6" x 5". They can be obtained, price 1s. each (postage 3d.) from the Publicity Officer, London Transport, 55 Broadway, Westminster, S.W.1.



and
HALF-TONE
Phone-Temple Bar 8765-6
GWYNNE HOUSE, 15-17, ESSEX STREET, STRAND, LONDON, W.C.2

LASCELLES
for
LINE

also -
2, 3 and 4
COLOUR
BLOCKS

• GRAVURE -
cylinder and
flat plate

• ELECTROS
and STEREOS

•
Artists and
Designers

BOOKS

long-standing success appeals to the Germans, who are apt to regard modern design as fashion stuff.

A straightforward investigation is needed into matters such as the following, which I naturally had no time to study. How have the Scandinavians gained such a large prestige and export trade in furnishings, what commercial means do they adopt, and who organises and pays for the propaganda? How much of the stocks of Brenninkmeyer (C & A Modes), the Dutch chain retailers active all over West Germany, is of British origin? How much do Woolworths of Germany buy in England? What are the universal reasons, if any against British goods? Have slow and uncertain deliveries anything to do with it? (This was suggested to me.)

There seems to be a great buying potential in Germany; we seem to have a price advantage so far. Surely in view of the coming European Common Market energetic attention should swiftly be given to this problem.

C. G. TOMRLEY
Manor Lodge Cottage
Straight Rd
Old Windsor
Berks.



Coffee house in Fleet Street

The designer of this coffee house, recently opened by The Coffee House Ltd, in Fleet Street, has taken advantage of various new techniques for interior decoration. All the working surfaces are in laminated plastics; the ceiling is in 'Bakelite' polyester resin reinforced with glass fibre and the 'Warerite' table tops incorporate original etchings in several colours by Dolf Rieser. The architect was Scott P. Barlow.

climate and that expressed the social attitude of their inhabitants'.

Gropius seems unwilling to admit that form is idea. Knowledge of optics is of no value except as an aid to the realisation of an idea; even the earliest builders were involved with concepts of some sort.

The essay on the 'Sociological Premises for Minimum Dwellings' and 'Houses, Walk-ups or Apartment blocks' should be compulsory reading for architects who still use, and planners who still advocate, the slab block - and wonder why it does not quite fit in with our present social climate. Gropius himself still believes in the continuing validity of a functional basis for town planning - 'neighbourhoods' (5,000 to 8,000 inhabitants) based on primary schools, and so on. His principal urban *panacea* are the community centre and the "beautiful plaza".

However, one wishes that the conclusions on page 62 of the 'Blueprint of an Architect's Education' could be hammered into the heads of all principals of schools of architecture, and that the advice to young architects given on page 99 in 'Architect - Servant or Leader?' would be taken. No better programme, no better advice, has been offered in this century.

PETER SMITHSON

Automation in theory and practice, Basil Blackwell Ltd, 12s 6d

The seven lectures reprinted here were organised by E. M. Hugh-Jones, fellow of Keble College, Oxford and given to Oxford university students by such well known exponents of automation as the Earl of Halsbury, R. H. Macmillan and Frank G. Woollard. The lecturers each attempt to define and describe automation (without always agreeing what it is) and in most cases some particular aspect such as the theory of control mechanisms, transfer machining or the trade union attitude is described. In a lecture on 'Social Aspects', Michael Argyle considers the assumption that automation calls for a large increase on the present output of science graduates entering industry. His view of this

and other social effects may be of interest to those who are already familiar with the better known facts of automation that are described by the other lecturers.

J. CHRISTOPHER JONES

MANUFACTURERS in this issue

Frank Allart & Co Ltd, 144 Sherborne Street, Birmingham Atlas Lighting Division, Thorn Electrical Industries Ltd, 105 Judd Street, WC1
Benjamin Armitage & Sons Ltd, Shepley, Nr Huddersfield
C. H. Brannam Ltd, Litchdon Pottery, Barnstaple, Devon
G. P. & J. Baker Ltd, 5 Giltpur Street, London EC1
The Brattel Electric Co Ltd, 27 Old Bond Street, W1
British Olivetti Ltd, 10 Berkeley Square, W1
Broadhead & Graves Ltd, 23 Golden Square, W1
Buoyant Upholstery Ltd, Sandyacres, Nr Nottingham
Carpet Manufacturing Co Ltd, Atlantic House, Holborn Viaduct, EC1
Carpet Trades Ltd, 19 Aldersgate Street, EC1
Chilton Electric Products Ltd, 19 Old Queen Street, SW1
Conran Fabrics Ltd, 6 Cadogan Lane, SW1
Courtaulds Ltd, 16 St Martin's-le-Grand, EC1
Donald Brothers Ltd, 287 Regent Street, W1
Dunlopillo Division, Dunlop Rubber Co, 77 King's Rd, SW3
Edward Elwell Ltd, Wednesbury, Staffs
Edinburgh Weavers Ltd, 102 Mount Street, W1
Farnbridge Furniture Ltd, 105 Dalston Lane, E8
Finnigan's Ltd, 17 New Bond Street, W1
W. Foxton Ltd, 6 Newgate Street, EC1
Furniture Industries Ltd, High Wycombe, Bucks
GWB Furnaces Ltd, PO Box No 4, Dibdale Works, Dudley
Guyonnes Ltd, 22 Grafton Street, W1
Grundig (GB) Ltd, 39 New Oxford Street, WC1
L. G. Hawkins Ltd, 30-35 Drury Lane, Kingsway, WC2
Heal's Wholesale & Export Ltd, 196 Tottenham Court Rd, W1
S. Hills & Co Ltd, 39 Albemarle Street, W1
IBM (United Kingdom) Ltd, 100 Wigmore Street, W1
Kandyta Ltd, Silverdale Road, Hayes, Middlesex
Kennings Group of Companies, Paternoster Row, Sheffield 1
Kodak Ltd, Kingsway, WC2
Liberty & Co Ltd, Regent Street, W1
Lister & Co Ltd, Liberty House, Regent Street, W1
W. Lucy & Co Ltd, Oxford
Metropolitan-Vickers Electrical Co Ltd, St Paul's Churchyard, EC4
D. Meredew Ltd, Letchworth, Herts
Morton Sundour Fabrics Ltd, 15-19 Cavendish Place, W1
Henry Nathan & Co Ltd, 2 Dean Street, W1
Primavera (London) Ltd, 149 Sloane Street, SW1
Ranton & Co Ltd, Rock Works, Commerce Rd, Brentford, Middlesex
Reeves & Sons Ltd, 13 Charing Cross Road, WC2
Ridgway Potteries Ltd, Ash Hall, Stoke-on-Trent
Arthur Sanderson & Sons Ltd, Berners Street, W1
Shell-Mex & B.P. Ltd, Shell-Mex House, Strand, WC2
E. Shipton & Co Ltd, 181 Queen Victoria Street, EC4
Archie Shine Ltd, 38 Upper Clapton Road, E5
Tootal Broadhurst Lee Co Ltd, 21 Cavendish Place, W1
Troughton & Young Ltd, 143 Knightsbridge, SW1
Turnbull & Stockdale Ltd, Kent House, Gt Tichfield St, W1
Warner & Sons Ltd, 77 Wells Street, Oxford Street, W1
David Whitehead & Sons Ltd, Rawtenstall, Lancs
A. Younger Ltd, Crown Wharf, Roach Road, E3

DESIGNERS in this issue

Tony Arnold, MSA; Gerald Benney, DESRCA; Louis le Brocq, MSA; Misha Black, OBE, RDI, PSIA; Eric Clements, DESRCA, MSA; Shirley Conran; Terence Conran; Beryl Coles, LSA; Lucienne Day, ARCA, PSIA; D. Evan-Cook, LSA; Frank Designs Ltd; Richard Guyatt, HONARCA; David Gentleman, ARCA; John Grenville; Kenneth Garland (Art Editor); K. J. Hutchings; Alec Hunter, PSIA; John J. Herbert; Peter Hatch, MSA (cover); Gwenfred Jarvis; A. B. Kirkbride, BA; Joseph Law; James A. Morris Designs Ltd; Enid Marx, RDI, PSIA; Mary Maron; David Mellor, DESRCA; Fiona Niven; Louis Osman; John Piper; A. L. Prinsep; John Reid, ARIBA, MSA; Stuart Rose, PSIA; Philip Stockford; Humphrey Spender, ARIBA, MSA; Peter Simpson; Alison and Peter Smithson, ARIBA; Standish Taylor Ltd; Hans Tisdall; Keith Vaughan; Robert Welch, DESRCA, MSA; John Wright, MSA.
Addresses of designers may be obtained from the Editor.

ES

BOOKS

Scope of total architecture, Walter Gropius, George Allen & Unwin, 15s

The 'Scope of Total Architecture' is an edited reprint of essays by Walter Gropius; the earliest was originally published in 1924 and the latest in 1954.

An immediate reaction to this book is 'what has happened to the Bauhaus Idea?', for it would be natural to expect a complete integration of text, pictures and layout, the whole conveying Gropius' ideological message of collaboration, and "the artist, prototype of the whole man".

In fact this book is almost unreadable; grey printing, fuzzy blocks, text and pictures unrelated, meaningless typographical conceits, and a 'good taste' cover.

The Museum of Modern Art's 'Bauhaus 1919-1928' designed by Herbert Bayer is one of the greatest works of art that came out of the 'twenties. Absolute conviction and absolute action indivisible - the Bauhaus style.

For people to whom the 'twenties is history, the basic design taught at the Bauhaus is seen as a basic conviction and the formal language of a style: a fever that was caught rather than a theory that was taught - a thing that died with the period. Gropius however maintains that there are teachable "principles of design" (without ever quite getting round to saying what they are). One of the essays in this book gives illustrations of simple optical illusions and optical mechanics, the implication being that knowledge of the "phenomenon of irradiation" etc, is the bedrock of a "science of design". And speaking of his own house in America he says "I tried to face the problem in much the same way as the early builders of the region had faced it when, with the best technical means at their disposal, they built unostentatious, clearly defined buildings that were able to withstand the rigors of the

TROS

EROS

s and
gners

W.C.2

Design reprint service

*Quotations for
reprints of articles
and features in DESIGN
may be obtained from
the Business Manager,
DESIGN, 28 Haymarket,
London SW1. Orders
should be placed not
later than the end of
the month of issue.*

HOPE'S
STYLE in METAL
LETTERS

H H H H

Flat Moulded

V-Shaped

TREE OF HEAVEN

or *Ailanthus glandulosa* is a rather dull wood. Our famous Sussex Oak is far more heavenly. Send for a free sample of each — just to prove it.

TURNERS of LEWES

Sussex Oak stands alone



Albert Turner & Son Limited
35 High Street, Lewes, Sussex
Telephone: Lewes 520 & 521

MULLARD RESEARCH LABORATORIES

have vacancies in their Engineering Division for Senior Electro-Mechanical Engineers, for design and development work, on a wide range of projects including the following:

ELECTRO-MECHANICAL CONTROL DEVICES

SPECIALISED MACHINE TOOL DESIGN

PARTICLE ACCELERATORS

ULTRASONIC TECHNIQUES

COMPONENTS AND ELECTRONIC EQUIPMENT

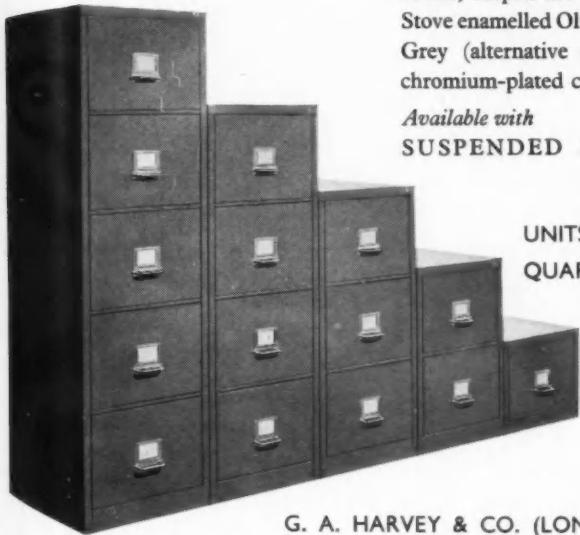
Applicants should have qualifications broadly equivalent to Engineering Degree standard:

Successful candidates will have at their disposal a well-equipped Engineering Laboratory and will be supported by an excellent Drawing Office and model shop facilities.

Good salaries commensurate with experience and qualifications. These posts come within the Company's Life Assurance and Superannuation Scheme.

Apply in writing to Mr. G. A. Taylor, Mullard Research Laboratories, Cross Oak Lane, Salfords, Near Redhill, Surrey.

Built for Heavy Duty



Substantially constructed for heavy duty, Harvey Steel Filing Cabinets have an inner framework of vertical steel channels welded together to give maximum strength and durability. This framework also ensures efficient support for the drawers, which glide smoothly and quietly to their fullest extent, despite heavy loading.

Stove enamelled Olive Green or Scarborough Grey (alternative colours to order), with chromium-plated card holders and handles.

Available with

SUSPENDED FILING CHASSIS
if desired

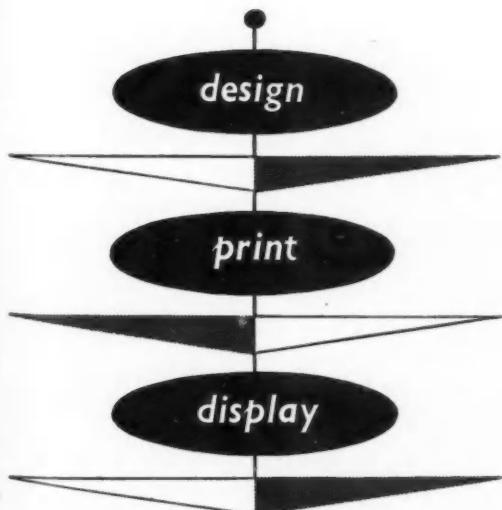
UNITS OF 1 TO 5 DRAWERS
QUARTO & FOOLSCAPSIZES

Please ask for Catalogue
No. DN800



STEEL FILING CABINETS

G. A. HARVEY & CO. (LONDON) LTD., Woolwich Road, London, S.E.7. GREENWICH 3232 (22 lines)

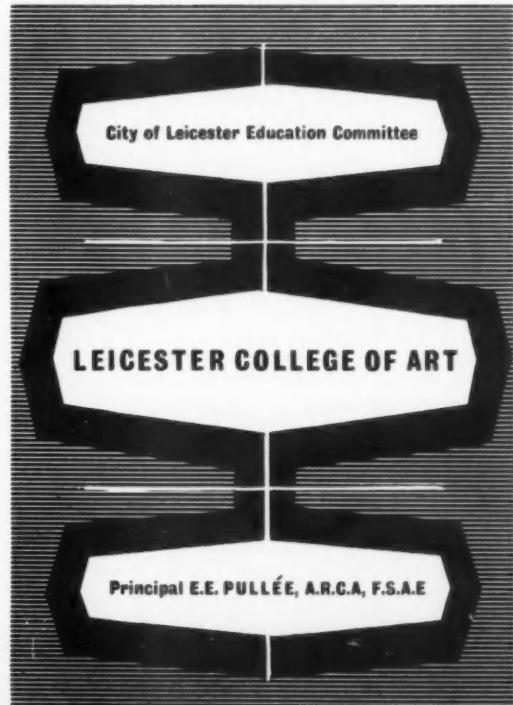


WALKERS

(showcards) limited

MANCHESTER 1.
LONDON OFFICE

CEN. 4965/6/7
HYDE PARK 2329



Classified advertisements

Rates: 9d per word (minimum, 15s). Box numbers, 1s extra

Copy: Last date for copy is 10th of month preceding date of issue

RECORD OF DESIGNERS

MANUFACTURERS requiring the services of designers, whether for staff positions or in a consultant capacity, are invited to apply to the Record of Designers, Co ID, London, or to the Co ID, Scottish Committee, 46 West George Street, Glasgow C2. They can obtain a short list of designers suitable to their particular purposes, which should be explained in some detail. This service is free to British manufacturers and incurs no obligation.

SITUATIONS VACANT

COVENTRY COLLEGE OF ART

Required September 1957, a Teacher of TYPOGRAPHIC DESIGN, to be responsible for instruction to full time N.D.D. Commercial Design students and day-release trade students to final standard City & Guilds. Applicants should hold Full Technological Certificate in Typographic Design or Typography and have suitable professional experience. Burnham Technical Scale Salary, Assistant Grade B £650 x 25 - £1025. Further particulars and application forms from Director of Education, New Council Offices, Coventry.

LONDON COUNTY COUNCIL

TECHNICAL COLLEGE FOR THE FURNISHING TRADES

September 1957

Part-time teaching staff for the following subjects: Drawing and Colour, Elementary Science, Technical Drawing, Wood Machining (day classes). Applied Science, Machinery and Processes, Work Study, Costing, Hand and Spray Polishing (evening classes). Apply, stating age and qualifications, subjects offered and days and times available to the Principal at College, Pitfield Street, N1. (1269)

YOUNG ARCHITECT or Architectural Draughtsman/Designer required for high class firm engaged on shop and office design in the Midlands. Excellent conditions. Apply giving details of experience and salary required to J. E. Slater Ltd, Smeeton Road, Kibworth, Leicestershire.

CREATIVE ARTIST and colorist, with staff experience in textile or carpet industry, required by wallpaper factory for a senior staff appointment. Box E8773, Whites, 72/78 Fleet St., London EC4.

COMMISSIONS & DESIGNS WANTED

INTENDING EXHIBITORS at Overseas Fairs should contact DAVIES TURNER & CO LTD for free guidance. Specialists in packing and shipping Exhibits and Stands. Phone SLOANE 3455 or write to 4 Lower Belgrave Street, London SW1, quoting Ref USK 680.

PACKAGE DESIGN and typography: leaflets, letterheads, and trade marks. Joy Funnell, LSIA, ATD, 12 Bloomfield Road, London N6. MOUNTVIEW 8736.

DESIGN is published for the Council of Industrial Design, The Design Centre, 28 Haymarket, London SW1 (Scottish Committee: at 46 West George Street, Glasgow C2). Printed in Great Britain by Balding & Mansell, London and W...

HAVE IT made in plastic. Let us quote you. Design and production. Formwise Limited, 406 Lea Bridge Road, London E10. Telephone LEYTONSTONE 6131 & 8251.

FREE LANCE INDUSTRIAL DESIGNER offers services for product design in engineering and plastics. Original design, re-design, models, prototypes, working drawings. Box 181, DESIGN, 28 Haymarket, London SW1.

per annum incl. rates, excl. Elect. Telephone stalled. Box 233, DESIGN, 28 Haymarket, London SW1.

L. B. LEVITT & CO (L. B. Levitt, LSIA). Building, fitting, decorating and joinery. 41a Grove Road, ADV 5262, RIP 5192.

FREE-LANCE Product Designer would be grateful manufacturers catalogues of fastening devices, adhesives, rolled and extruded sections. Gervase El 7 Hertford Street, Park Lane, London W1.

COMPETITION

Win £75 by designing a carpet and entering it in our competition. Write or phone for details to FURNISHING, Drury House, Drury Lane, Russell Street, W.C.2. (TEM 3422).

FRAMING

PICTURE FRAMES available in all sizes. Special design and finishes made to order. Mounts cut in a fine range of new colours. The Rowley Gallery, 87 Campden Street, off Kensington Church Street, W8. PARK 4349.

PRINTING

THE CARAVEL PRESS offers a practical design and printing service to all who appreciate original ideas and first-class production. 11 Moxon Street, London W1. HUNTER 0492.

KINGS NORTON PRESS (1947) LTD, Colour Printers, have the most modern equipment to produce first class printed material coupled with a design service of outstanding merit. Factory - Kings Norton, Birmingham 30. Telephone: KINGS Norton 2262. London Office - Blackfriars House, New Bridge Street, London EC4. Telephone: CITY 6289.

PHOTOGRAPHY

A COMPLETE PRINTING SERVICE with a Studio for modern design; a Studio for Industrial Photography, including the new American Colour process, coupled with a fully automatic Printing Plant is the unique service offered by Nutt & Stevens Ltd, 3 Nedham Street, Leicester. A personal service by the Directors of the Company to all enquiries.

JOHN BAKER welcomes your enquiries concerning creative photography at our studio or on location. Telephone PADDINGTON 2119. 8 Norfolk Mews, London W2.

MISCELLANEOUS

METAL - WIRE - TUBULAR WORK. Let us manufacture your prototypes and/or production runs. Holborn Metal Works, 334 Upper Street, N1. CAN 8042.

TO LET office or showroom. Marble Arch. Approx. 18 ft x 15 ft. Parquet floor, contemporary decor. £200

ADVERTISERS in this issue

Airscrew Co & Jicwood Ltd, The	...
Balding & Mansell Ltd	...
Beresford & Hicks	...
British Aluminium Co Ltd, The	...
British Geon Ltd	...
Collaro Ltd	...
Fibreglass Ltd	...
General Electric Co Ltd, The	...
Graphik	...
Hammer, Geo. M. & Co Ltd	...
Harland, M. & Son Ltd	...
Harvey, G. A. & Co (London) Ltd	...
Heals Contracts Ltd	...
Hille of London Ltd	...
Hope, Henry & Sons Ltd	...
Imperial Chemical Industries Ltd	...
Lascelles & Co Ltd	...
Leicester College of Art	...
Line, John & Sons Ltd	...
London Transport Executive	...
Monotype Corporation Ltd, The	...
Orient Line	...
Pilkington's Tiles Ltd	...
Royal Sovereign Pencil Co Ltd, The	...
Stockwell/Tibor/Gimson & Slater	...
Turner, Albert & Son Ltd	...
Walkers (Showcards) Ltd	...
Wall Paper Manufacturers Ltd, The	...

Mr. Telephone in
Market, London SW1.

). Building, shop
Grove Road, y

ld be grateful to
ning devices, m
s. Gervase Elue
on WI.

MAKING

me your enquiry
experimental and de-
signing units
prototypes in
carnival displays;
designs and draw-
ings; film and theatrical
costume trimming
120 Rad Road, Lenton

514

110

100

The
...

reet, Glasgow C.
London and W.